National Association of
College and University
Business Officers

A6705.2.2 9/82

Results of the 1981 NACUBO Comparative Performance Study and Investment Questionnaire

The NACUBO Investments Committee hereby conveys its thanks to the many persons who made this study possible. These include: the business officers who voluntarily supplied data and answered the questionnaire; Bruce Dresner, who serves so capably as survey coordinator; and Dartmouth College, which provides the use of its computer.

© 1982 by NACUBO
Printed in the United States of America

Results of the 1981 NACUBO
Comparative Performance Study
and Investment Questionnaire

ERRATA

Page 70

Please note that in the first sentence under Venture Capital, the number 33 should be changed to 32. Additionally, a corrected Table 56 is shown here.

Table 56

Range of Responses for all Institutions of Venture Capital Investments as a Percentage of June 30, 1981 Endowment Assets

Percentage of Endowment	Over $100 Million	$50-$100 Million	$25-$50 Million	$10-$25 Million	$5-$10 Million	Under $5 Million	Total
Under 1%	7	1	1	0	0	0	9
1 - 2.5%	10	1	1	1	1	0	14
2.5 - 5%	5	1	1	0	1	0	8
5 - 7.5%	0	0	0	0	0	0	0
7.5% - 10%	0	0	0	0	0	0	0
Over 10%	0	0	0	0	0	0	0
TOTAL	22	3	3	1	2	0	31

RESULTS OF THE 1981 NACUBO
COMPARATIVE PERFORMANCE STUDY
AND
INVESTMENT QUESTIONNAIRE

by

Bruce M. Dresner

Survey Coordinator

Under the Direction of
the NACUBO Investments Committee

NATIONAL ASSOCIATION OF COLLEGE AND UNIVERSITY BUSINESS OFFICERS
One Dupont Circle, Suite 510
Washington, D.C. 20036

PREFACE

The purpose of the annual NACUBO Comparative Performance Study (CPS) is to aid administrators in evaluating the performance of their investment pools.

The CPS was begun in 1971 as an expansion of a survey conducted in prior years by Dartmouth College. Although the study originally gathered information only on performance, it now includes an investment questionnaire which provides additional pertinent information relating to endowment funds and their management.

The 1981 study contains two parts: Section I--comparative performance information and related investment performance statistics, and Section II--other endowment statistics.

Throughout the study all performance figures are computed using annual data supplied by participating institutions. The theory behind the methodology for the investment pool comparative performance computations is described in Appendix I. Performance calculations are explained in detail in Appendix II. Performance information received from investment services or produced internally may vary from results in this report if such figures are based on other than annual data or computed in a different manner. While it is believed the results can be viewed with considerable validity, a very deviant response or an exceptional outcome should be treated with caution.

Appendix III is a glossary of terms and definitions which participants were asked to keep in mind to permit consistency of responses and which the reader may find as a helpful reference.

The confidential nature of participant responses to investment performance questions has been maintained through use of code numbers. However, select non-performance data has been identified by institution in the belief that this information is most useful when so identified.

Inquiries pertaining to the content of this report or to the methodology for the investment pool comparative performance computations should be addressed to Bruce M. Dresner, NACUBO Survey Coordinator, P.O. Box 31, Hanover, New Hampshire 03755, (603) 646-2445. Additional copies of this report are available through the NACUBO office at $25 per copy for members, $50 for non-members. (Orders must be prepaid.) A Summary Comparative Performance Study is available at $5 per copy.

TABLE OF CONTENTS

Page

Preface iii

SECTION I - INVESTMENT PERFORMANCE

INTRODUCTION 1
- Participants 1
- Investment Objectives 2
- Size of Investment Pools 2
- Pool Characteristics 3
- Pool Composition 3
- Validity of CPS Data 3

PARTICIPATING INSTITUTIONS 4

PERFORMANCE 8
- How Did Endowment Funds Do in 1980-81? 8
- Bond Indices 11
- Performance Summary 15
- Performance by Investment Objective 16
- Performance by Size 17
- Performance Based on Equity Weightings 18
- Keeping Pace With Inflation 19
- Equity Only and Bond Only Performance 19
- Internal Investment Management Performance 21

ASSET COMPOSITION 22
- Summary 22
- Shifts in Investments 25
- Shifts in Investments - 1974 to 1981 27
- Distribution of Asset Composition 28
- Asset Diversification 29
- Equity Price Earnings Ratio 31
- Non-Controllable Assets 31

RISK MEASUREMENT 31
- Description 31
- Observations 32

STOCK AND BOND TURNOVER 33
- Method of Calculation 33
- 1981 Stock Turnover 33
- 1981 Bond Turnover 33
- Stock and Bond Turnover and Performance Implications 34

INVESTMENT ADVISORY FEES AND DISCRETION 38
- Investment Fees 38
- Investment Discretion 38

SECTION II -- ENDOWMENT CHARACTERISTICS

INTRODUCTION 40

GENERAL INFORMATION 40
    Fiscal Year 40
    Endowment Distribution of Participants 40
    Life Income Funds 41
    Non-Security Assets 41
    Non-Controllable Assets 42

GROWTH IN ENDOWMENT 43
    Endowment Growth and Real Growth 43
    Fiscal 1981 Endowment 45
    Gifts to Endowment 46

ENDOWMENT SPENDING AND SUPPORT 47
    Current Fund Revenue and Endowment Income 47
    Endowment Coverage 47
    Budget Guideline 47
    Spending Practices of Institutions 51
    Restricted Yield 54
    Utilization of Quasi-Endowment 54
    Profile of Distributable Endowment Income 55
    Application of Endowment Spending Formulas 56
    Endowment Support 57

INVESTMENT MANAGEMENT AND CUSTODY MATTERS. 60
    Investment Management 60
    Custodial Arrangements 67
    Custodial Fees 67

INVESTMENT POLICY AND PRACTICE 68
    Investment Policy Statement 68
    Option Writing 68
    Venture Capital 70
    Futures Market 70
    Investment in Gold 70
    Commodities Market 70
    Foreign Investments 70
    South African Investments 71

EXHIBITS

I. 186 PARTICIPATING INSTITUTIONS (209 INVESTMENT POOLS). 72
II. CHARACTERISTICS OF PARTICIPATING INVESTMENT POOLS 74
III. DETAILED PERFORMANCE SUMMARY -- AVERAGE ANNUAL TOTAL RETURN . 81
IV. INSTITUTIONS WHICH APPLY TOTAL RETURN FOR BUDGETING PURPOSES . 111
V. INDEX OF INVESTMENT MANAGERS 117
VI. INDEX OF ENDOWMENT CUSTODIANS. 130

APPENDIXES

I. Method Used for Measuring Performance. 141

II. Explanation of Computations. 142

TERMS AND DEFINITIONS. 148

RESULTS OF THE NACUBO 1981 COMPARATIVE PERFORMANCE STUDY AND INVESTMENT QUESTIONNAIRE

SECTION I -- INVESTMENT PERFORMANCE

INTRODUCTION

Participants

The 1981 NACUBO Comparative Performance Study (CPS) contains information as of June 30, 1981, on 209 college and university investment pools.* These institutions have endowment and life income funds of approximately $17.8 billion at market value. The total for all U.S. college and university endowment funds was $20.7 billion, according to the most recent (1980) HEGIS data (one year's difference between NACUBO and HEGIS data).

The institutions in the NACUBO survey are categorized by size as follows:

Table 1

Participating Institutions

(In Millions of Dollars)

Endowment Size	Number Reporting	Life Income Funds	Endowment Funds	Total
$100 million and over	43	$441	$13,149	$13,590
$50 to $100 million	28	88	1,862	1,950
$10 to $50 million	82	89	1,940	2,029
Under $10 million	39	10	214	224
TOTAL	192	$628	$17,165	$17,793

A detailed list of participating institutions ranked by order of endowment size is provided as Table 3, page 3, of this report. As a further helpful reference, an alphabetical listing of institutions participating in the CPS is also provided as Exhibit I, page 72.

Exhibit II, page 74 contains a coded listing as of June 30, 1981, of characteristics of the pools.

---

*The terms "endowment" and "investment pools" are not synonomous. All of an institution's endowment funds may not be contained in its investment pool(s). Investment pools might include--besides true, quasi, or term endowment--other funds retained in the endowment and similar funds group, such as life income funds, loan funds, and temporarily invested plant funds.

Investment Objectives

Of the 209 investment pools, 82 (39%) follow a total return investment philosophy, 117 (56%) follow a balanced investment philosophy, and 10 (5%) follow an income-oriented philosophy. These three objectives are defined as follows:

> Total Return - Investment returns are sought from both market appreciation and dividends and interest; current income requirements generally do not dictate the kind of securities that may be held because primary emphasis is on long-term overall return.
>
> Balanced - The pooled funds are invested in such a manner as to minimize investment risks without unduly sacrificing current income or the possibility for some long-term growth. This is usually done by investing a portion of the pool in fixed income securities.
>
> Income Oriented - Investment policy is dictated by current income needs; market appreciation is never utilized for current operating purposes, and primary emphasis is on current maximization.

For performance comparison purposes the latter groups have been combined. Only six pools changed their investment objective during the year. Three of these changed from balanced to total return, two from total return to balanced, and one changed from income-oriented to total return.

Size of Investment Pools

For performance comparison purposes the investment pools have been categorized by size as follows:

Table 2

Investment Pools by Size

Size of Pools	1974 Number	1981 Number	Approximate Value of Pools at June 30, 1981 in Thousands
Over $50 million	33	62	$12,812,154
$10 to $50 million	43	90	2,198,296
Under $10 million	71	57	266,124
TOTAL	147	209	$15,276,574

From 1974 to 1981 the size of the investment pools participating in the Comparative Performance Study has increased. In 1974, 48% of the pools in the study were under $10 million, while in 1981 only 27% were in that category. Correspondingly, the $10 million to $50 million group increased from 29% to 43%, and the over $50 million group increased from 22% to 30%.

Pool Characteristics

In terms of characteristics, 167 of the pools were described as pooled endowment funds consisting principally of endowment and similar funds. Sixteen were described as combinations of more than one separately invested funds; 9 as pools consisting of only those assets over which management has discretion; 11 as separately invested funds which have been unitized to enable performance to be accurately measured; and 6 as pooled life income funds.

Pool Composition

Of the 209 pools, 149 contained true and quasi-endowment funds, 27 contained only true endowment funds, and 3 contained only quasi-endowment funds. The 30 remaining pools included not only endowment funds but also investments or other fund groups.

Validity of CPS Data

Because NACUBO is dealing with a wealth of data, errors in compiling results may occur. Numerous checks have been incorporated over the years to keep such inconsistencies to a minimum. However, if the data supplied NACUBO (unit value and income per unit figures) is erroneous, the probability is that only very deviant figures will be spotted. Except for obvious erroneous and deviant figures, all data provided is treated as correct. Although each institution is responsible for the accuracy of data, it is felt that a high degree of reliability can be placed on the raw data supplied. Unit values and income per unit figures for over 75% of the pools in the NACUBO CPS are contained in independently audited financial reports, and over 90% are reported either in the institution's or their board of trustee's annual report.

Table 3

ENDOWMENT AND LIFE INCOME FUND ASSETS
RANKED BY ENDOWMENT MARKET VALUE AT JUNE 30, 1981
(000 Omitted)

	Institution	Life Income Funds	Endowment Funds	
1	Harvard University	$38,370	$1,713,350	
2	The University of Texas System	3,816	1,485,090	
3	Princeton University	7,805	920,922	
4	Yale University	6,800	792,600	
5	Stanford University	89,395	598,990	(A)
6	Columbia University	4,600	590,400	
7	Massachusetts Institute of Technology	10,654	500,237	
8	University of Chicago	12,900	397,100	
9	Rice University	11,619	376,865	
10	Cornell University	26,535	360,441	

	Institution	Life Income Funds	Endowment Funds	
11	Northwestern University	13,838	320,552	
12	New York University	1,709	276,351	(A)
13	Rockefeller University	393	270,568	
14	Washington University	6,576	266,579	
15	Emory University	0	252,859	(A)
16	Johns Hopkins University	5,643	242,430	
17	Dartmouth College	20,005	234,055	
18	University of Pennsylvania	7,798	232,667	
19	University of Notre Dame	4,242	218,243	
20	California Institute of Technology	28,239	202,090	
21	University of Virginia	263	179,697	
22	Vanderbilt University	26,845	174,715	
23	Duke University	7,095	153,950	
24	McGill University	0	153,200	
25	University of Delaware	101	143,996	
26	Case Western Reserve University	12,018	142,286	
27	Brown University	4,686	139,484	
28	Wesleyan University	749	134,395	
29	Wellesley College	9,294	133,192	
30	Carnegie-Mellon University	2,407	132,468	
31	Smith College	0	129,126	
32	Swarthmore College	3,762	117,066	
33	Williams College	2,952	117,044	
34	Southern Methodist University	819	116,855	(M)
35	University of Michigan	7,148	116,482	
36	University of Minnesota	172	113,867	
37	University of Pittsburgh	323	113,216	
38	Vassar College	10,546	104,834	
39	Rensselaer Polytechnic Institute	4,814	103,943	
40	University of Cincinnati	3,975	103,612	
41	Oberlin College	3,377	103,102	
42	Berea College	3,295	97,534	
43	Amherst College	2,581	95,009	
44	University of Richmond	487	88,133	
45	Baylor University	11,290	87,500	
46	Grinnell College	4,047	85,552	
47	Ohio State University	781	84,794	
48	Loyola University of Chicago	200	83,615	
49	Wake Forest University	775	77,589	
50	Lehigh University	5,206	72,980	
51	Pomona College	35,950	72,530	
52	Brandeis University	4,242	72,528	
53	Georgetown University	1,818	71,844	
54	Lafayette College	0	71,558	
55	Middlebury College	2,092	70,211	
56	Rochester Institute of Technology	1,273	64,656	
57	Carleton College	2,625	61,966	
58	State University of New York	26	61,478	
59	Mount Holyoke College	3,270	61,449	
60	Boston University	1,790	60,898	
61	Wabash College	8,970	59,589	
62	Thomas Jefferson University	620	58,995	
63	Syracuse University	8,596	58,816	
64	Academy of the New Church	0	55,797	
65	Bryn Mawr College	603	55,521	(M)

	Institution	Life Income Funds	Endowment Funds	
66	Bowdoin College	3,351	55,303	
67	University of Illinois	9,542	52,672	
68	Earlham College	616	49,719	
69	Hamilton College	1,615	49,658	
70	University of Miami	4,423	47,707	(M)
71	Tufts University	853	47,249	
72	Trinity College (Connecticut)	667	47,181	
73	Occidental College	6,988	46,555	
74	Baylor College of Medicine	0	45,470	
75	Cooper Union	159	44,393	
76	Colorado College	0	44,181	
77	University of North Carolina	646	43,605	
78	University of Wisconsin System	0	43,267	
79	Rutgers, The State University of New Jersey	0	42,601	
80	Worcester Polytechnic Institute	964	41,547	
81	Bucknell University	496	41,254	
82	Radcliffe College	975	40,347	
83	Colgate University	7,263	39,653	(M)
84	Haverford College	917	38,179	
85	Southwestern University	0	37,915	
86	Hampton Institute	0	36,656	
87	Agnes Scott College	0	35,487	
88	Drew University	0	34,062	
89	University of Missouri	2,031	34,027	
90	University of Vermont	275	32,006	
91	Whitman College	5,679	31,760	
92	Claremont Mens College	11,611	31,516	
93	Colby College	2,174	29,367	
94	University of Santa Clara	3,505	28,402	
95	Davidson College	443	27,656	
96	Lawrence University	0	27,369	
97	Austin College	0	27,152	(M)
98	Ohio University	0	27,050	
99	University of Denver	2,319	27,014	
100	Columbia University Teachers College	220	26,465	(M)
101	Barnard College	180	25,880	
102	University of Alabama System	0	25,795	
103	Berry College	40	25,535	
104	Rhode Island School of Design	56	24,556	
105	University of Tennessee - Knoxville	9,511	24,165	
106	College of Wooster	0	24,033	
107	Simmons College	0	22,014	
108	Denison University	3,361	21,923	
109	George Washington University	0	21,834	
110	Spelman College	0	21,610	

	Institution	Life Income Funds	Endowment Funds	
111	Sweet Briar College	177	20,946	
112	University of Maryland	0	20,714	
113	University of Wisconsin Foundation	3,713	20,281	
114	Marquette University	79	19,827	
115	Cornell College	0	19,280	
116	Hendrix College	1,530	18,926	(J)
117	Ohio Wesleyan University	1,759	18,849	
118	Pennsylvania State University	1,586	18,320	
119	Wheaton College	344	17,656	
120	Dickinson College	1,470	17,625	
121	Clark University	1,649	17,289	
122	Coe College	0	16,886	
123	University of Utah	463	16,883	
124	Reed College	2,170	16,786	
125	Wittenberg University	5,631	16,457	
126	Alma College	98	16,455	
127	Franklin & Marshall College	2,566	16,218	
128	Michigan State University	171	15,798	
129	Furman University	2,237	15,762	
130	University of Tennessee - Chattanooga	42	15,614	
131	Oregon State Board of Higher Education	0	15,377	
132	University of Puget Sound	1,562	15,088	(A)
133	Baldwin-Wallace College	673	14,894	
134	Kalamazoo College	867	14805	
135	Wentworth Institute of Technology	0	14,577	
136	University of Arizona	0	14,367	
137	Connecticut College	0	14,046	
138	Allegheny College	538	13,659	
139	University of Tulsa	101	13,537	
140	Indiana University	1,016	13,452	
141	Norwich University	92	12,849	
142	Temple University	0	12,722	
143	Endowment Association of College of William and Mary	221	12,204	
144	University of Maine	0	11,983	
145	Drake University	125	11,875	(M)
146	University of Dayton	0	11,403	
147	Washburn College	0	11,403	
148	Mercer University	297	11,357	
149	Whittier College	575	10,999	
150	Kenyon College	464	10,856	
151	Georgia Institue of Technology	0	10,810	
152	Hobart & William Smith College	160	10,704	
153	University of Iowa Foundation	3,075	9,740	
154	Muhlenberg College	0	9,045	
155	University of Arkansas	285	9,005	
156	St. Norbert College	0	8,659	
157	Saint Mary's College (Notre Dame)	0	8,645	
158	Wells College	338	8,500	
159	North Carolina State University	0	8,408	
160	Alfred University	176	8,089	

	Institution	Life Income Funds	Endowment Funds
161	Ohio Northern University	0	7,684
162	Babson College	178	7,441
163	Doane College	370	7,333
164	Rollins College	177	7,314
165	Skidmore College	973	7,288
166	University of Nebraska	0	7,148
167	University of Scranton	0	6,781
168	Clarkson College of Technology	239	6,603
169	Augustana College	875	6,527
170	Hope College	3,394	6,490
171	Carroll College	309	6,102
172	Moravian College	142	6,027
173	Loras College	5	6,013
174	University of Evansville	67	5,936
175	The American University	0	5,818
176	College of William and Mary	0	5,529
177	Washington State University	45	5,351
178	Medical College of Pennsylvania	282	5,212
179	University of Akron	0	3,940
180	University of Oregon Development Foundation	0	3,683
181	Philadelphia College of Textile and Science	0	3,599
182	Canisius College	95	3,538
183	Chapman College	38	3,157 (M)
184	University of Tampa	74	2,928
185	Trinity College (D. C.)	72	2,639
186	Western Michigan University	843	2,564
187	Arizona State University	531	2,325
188	Newberry College	0	2,055
189	Eastern Michigan University	49	1,938
190	University of Mississippi	0	1,850
191	University of Connecticut	0	1,833
192	Monmouth College	0	1,472
TOTAL		$628,708	$16,929,840

NOTE:
(A) Figures are as of August 31, 1981
(J) Figures are as of July 31, 1981
(M) Figures are as of May 31, 1981

PERFORMANCE

How Did Endowment Pools Do in 1980-81?

The purpose of the NACUBO Comparative Performance Study is to aid administrators in evaluating their endowment pool's investment performance. Measuring comparative performance among pools with similar characteristics, objectives, and risk levels is useful in understanding the investment results achieved with respect to desired goals.

- For the year ending June 30, 1981, the 209 participating college and university pools had an average rate of return of 14.6%. This rate exceeds the 10.7% average rate of return earned by a composite of the S&P 500 Index, the Lehman Brothers-Kuhn Loeb Bond Index, and the average Treasury Bill rate using the same asset composition as the average investment pool (55.4% equities, 26.7% bonds, 13.2% cash and equivalents, 2.1% real estate, and 2.6% other assets).

- The study also shows that for the three-year period ending June 30, 1981, the 12.5% average rate of return of the college and university pools exceeded the 10.3% rate of the composite market index.

- For the five-year period ending June 30, 1981, the 9.1% average return of the endowment pools was higher than the 7.1% rate of the composite index.

- Endowment pools outperformed inflation as measured by the Consumer Price Index ("CPI") and the Higher Education Price Index ("HEPI") for the one- and three-year periods ended June 30, 1981; outperformed only the HEPI for the five-year period; and outperformed neither the CPI nor the HEPI for the ten-year period.

- In terms of investment objectives, those pools with a "total rate of return" objective outperformed those with "balanced and income" objectives. This proved the case for the one-, three-, five-, and ten-year periods ended June 30, 1981. The total rate of return pools on average were 62% invested in equities over the past five years, while the balanced pools were only 51% invested in equities.

- The study reveals that on average the larger pools (over $50 million) outperformed the middle pools ($10-$50 million) which outperformed the smallest pools (under $10 million) during the past year, as well as for the three-, five-, and ten-year periods measured. For the last five years the groups had average equity positions of 60%, 56%, and 49% for the largest, middle, and smallest sized pools respectively.

- Those investment pools which were managed externally during the year ending June 30, 1981, after adjusting for their respective asset compositions, had about a two percentage point better performance than those managed internally. In 1980 externally managed pools also averaged about two percentage points better than those managed internally. In 1979 results were about equal. For each of the two previous years the internally managed pools outperformed those managed externally.

- Investment pools whose bonds were more actively managed, i.e., had higher bond turnover percentage rates, on average outperformed those pools which had lower turnover rates. Pools with the highest and lowest equity turnover performed equally.

- Investment pool assets continued to shift from equities, an occurrence which has taken place every year since NACUBO began collecting such data in 1974. Pool assets also continued to shift toward bonds. This has happened in every year except 1977, when bond positions remained stable.

To provide a more definitive understanding of how an institution might interpret its investment pool performance, the performance for the average investment pool is presented in Table 4 for the one-, three-, five-, and ten-year periods ending June 30, 1981. Exhibit III, page 81, shows the detailed results for each pool participating in the 1981 CPS.

Table 4

Average Total Return Performance For Periods Ended June 30, 1981

	One Year	Three Years	Five Years	Ten Years
All Investment Pools Measured	14.64%	12.49%	9.06%	6.45%
By Investment Ojective:				
Total Return Pools	18.19	14.19	10.00	6.85
Balanced or Income Pools	12.36	11.44	8.47	6.17
By Size:				
Over $50 million	16.61	14.37	9.92	7.19
$10 to $50 million	15.27	12.76	9.37	6.38
Under $10 million	11.52	9.99	7.57	5.45
Comparative Indices:				
Dow-Jones Industrial Average	19.39	12.53	5.10	5.79
S&P 500 Index	20.86	17.12	10.01	7.19
Salomon Brothers Bond Index	-14.11	-4.05	.06	3.12
Lehman Brothers-Kuhn Loeb Bond Index	-9.53	-1.91	1.64	N/A
Other Benchmarks:				
The Common Fund for Equity Investments	29.49	22.92	16.44	8.15
The Common Fund for Bond Investments	-9.90	-.59	N/A	N/A
Inflation Benchmarks:				
Consumer Price Index	9.52	11.59	9.79	8.37
Higher Education Price Index	9.77	9.13	8.10	7.36

While one year is too short a time period from which to draw any significant conclusions regarding performance, for the year ended June 30, 1981, 53 (25%) of the 209 pools in the CPS outperformed the Dow-Jones Industrial Average. This widely followed benchmark should not be the sole measure used when comparing the performance of the average endowment investment pool. A better measure, but one still not completely representative for comparative purposes, is the S&P 500 Index. Only 36% of the 209 pools outperformed the S&P 500 in 1980-81, which was a period of increasing stock prices. This is not surprising since most endowment pools maintain a balanced investment mix and are not totally invested in stocks. All of the endowment investment pools outperformed both the Salomon Brothers Bond Index and the Lehman Brothers-Kuhn Loeb Bond Index. This too is not suprising due to the large stock component of these funds and to the short-term liquid asset cash position of most pools after a year of unusually high money market yields. For those few pools totally invested in either common stocks or long-term bonds, a direct comparison to the S&P 500 Index or either bond index, respectively, is more valid.

Table 5

Investment Pools Which Outperformed the Popular Indices
For Periods Ended June 30, 1981

Period Ended June 30, 1981	Dow-Jones Industrial Average	S&P 500 Index	Salomon Brothers Bond Index	Lehman Kuhn Loeb Index
One Year				
Number of Pools Measured	209	209	209	209
Number Outperforming Index	53	36	209	209
Percent	25%	17%	100%	100%
Three Years				
Number of Pools Measured	194	194	194	194
Number Outperforming Index	89	27	194	194
Percent	46%	14%	100%	100%
Five Years				
Number of Pools Measured	181	181	181	181
Number Outperforming Index	169	60	181	180
Percent	93%	33%	100%	99%
Ten Years				
Number of Pools Measured	133	133	133	N/A
Number Outperforming Index	79	35	130	N/A
Percent	59%	26%	98%	N/A

Bond Indices

In previous years the NACUBO CPS cited the Salomon Brothers Index as an appropriate comparative "bogey" for the fixed-income portion of investment pools relative to the Lehman Brothers-Kuhn Loeb Bond Index. Because of increased volatility in the bond market and a greater emphasis on active bond management, more and more money managers use the broader Lehman Brothers Kuhn Loeb Index to evaluate the performance of fixed-income assets. The 1981 CPS also uses the Lehman Index for this purpose. The composition of the Salomon and Lehman Indices is as follows:

> THE SALOMON BROTHERS HIGH-GRADE LONG-TERM CORPORATE BOND INDEX
>
> is comprised of all publicly issued, fixed-rate, non-convertible domestic debt of the three major corporate classifications: industrial, utility, and financial. Bonds included have a quality rating of AAA-AA by Standard & Poor's. Only bonds with a minimum outstanding principal amount of $25,000,000 and a minimum maturity of 12 years are included. The index has a maturity of 25 years.
>
> THE LEHMAN BROTHERS-KUHN LOEB CORPORATE BOND INDEX
>
> is comprised of all publicly issued, fixed-rate, non-convertible domestic debt of the three major corporate classifications: industrial, utility, and financial. Bonds included have a rating of at least Baa by Moody's Investors Service, BBB by Standard & Poor's Corporation, or, in the case of bank bonds not rated by either Moody's or Standard & Poor's, BBB by Fitch Investors Service. Only bonds with a minimum maturity of one year are included. All pass-through issues are excluded.

Some may consider the above summary incomplete in that it does not take into account important considerations concerning a specific investment pool, such as the pool's objective (which might be quite different from that of either the stock or bond indices), its risk posture (which in most instances is below that of the stock market but above the bond market), and other policy constraints which have been placed on the pool.

The 1976 CPS marked the first time NACUBO attempted to evaluate investment pool performance on a "risk-adjusted" basis. For fiscal 1978, it was noted that on a risk-adjusted basis significant value was added to endowment performance by investment management. In 1979 results were consistent with what might be expected. In 1981, as in 1980, results show that significant value was added above what might be expected.

It is also helpful to view performance in the context of the distribution of the investment pool returns. Graph I shows the performance distribution for all investment pools.

In Exhibit III, the total return for each pool is listed, along with the relative ranking of each pool for the one-year, three-year, five-year, and ten-year periods ending June 30, 1981.

What should be of interest and concern to trustees and those administrators responsible for an investment pool is the return achieved from a blend of market indices that mimics their own pool. In the case of the average pool, this means the return achieved as a result of the investment of its 55.4% stock component, 26.7% bond component, 13.2% cash component, 2.1% real estate component, and 2.6% miscellaneous assets component. (This is the second year NACUBO requested information regarding the real estate component of endowment pools, which previously was reported as part of miscellaneous assets.) On this basis, the one-year return of 14.64% for all investment pools appears favorable compared with the return of 10.73% which might be expected based on the asset components of the pool shown in Table 6.

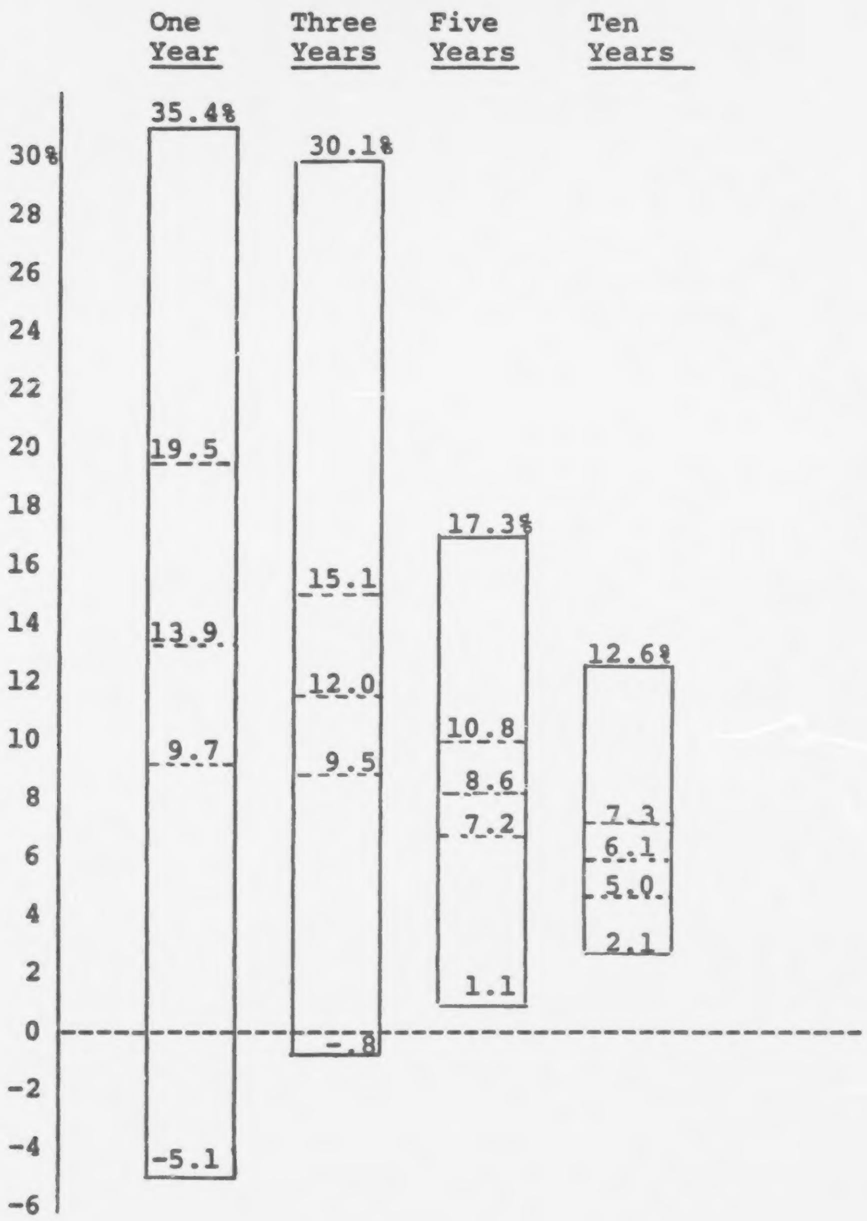
Table 6

Estimated Asset Component Return of All Investment Pools for the One-Year Period Ending June 30, 1981

Asset Component	Index	Fiscal 1980-81 Total Return Percent	Average Investment Pool Asset Component	Expected Total Return
Stocks	S&P 500	20.86%	55.4%	11.56%
Bonds	Lehman-Kuhn Loeb	-9.53	26.7	-2.54
Cash	Av. Treas. Bill	12.98	13.2	1.71
Real Estate	N/A	0	2.1	0
Miscellaneous	N/A	0	2.6	0
TOTAL			100.0%	10.73%

GRAPH I

Quartile Performance Distribution Of All Investment Pools* For Periods Ended June 30, 1981



*C99's total return performance results for the one-, three-, five-, and ten-year periods would have been 251.27%, 64.24%, 42.74%, and 40.53% respectively, if an extraordinary investment was included. Even with this investment excluded, its ten-year total return was 27.61% and thus not included in Graph I.

Table 7 shows an analysis of the components which make up total return.

Table 7

Total Return and Component Performance for the One-Year Period Ended June 30, 1981

	Appreciation Change In Market Value	Yield Income Return*	Total Return
Average Investment Pool	6.94%	7.70%	14.64%
Dow-Jones Industrial Average	12.55	6.84	19.39
S&P 500 Index	14.88	5.98	20.86
Salomon Brothers Bond Index	-22.94	8.83	-14.11
Kuhn Loeb Bond Index	-18.54	9.01	-9.53
Average One-Year Treasury Bill Rate	0	12.98	12.98

*Assumes reinvestment of income based on the average of the beginning and ending year market values (see Appendix II, page 142).

Table 8 indicates the yield (income return) to be expected from various types of assets. The 7.43% expected yield using the asset component analysis is close to the actual yield of 7.70% of the average pool shown in Table 7. The return would have been closer if some assumption had been made regarding real estate and miscellaneous assets. Assuming a 5% yield for these assets, which represent 4.7% of total assets, the expected yield would have been 7.66%.

Table 8

Yield Performance for the One-Year Period Ending June 30, 1981

Asset Component	Index	Fiscal 1979-80 Yield	Average Investment Pool Asset Component	Expected Yield
Stocks	S&P 500	5.98%	55.4%	3.31%
Bonds	Lehman-Kuhn Loeb	9.11	26.7	2.41
Cash	Av. Treas. Bill	12.98	13.2	1.71
Real Estate	N/A	0	2.1	0
Miscellaneous	N/A	0	2.6	0
TOTAL			100.0%	7.43%

Performance Summary

The average total return of the endowment investment pools is considerably better (391 basis points or 3.9% higher return) than what might be expected based on the asset components of the funds (14.64% compared to 10.73%). This could be for a number of reasons. Perhaps assuming no return at all on 4.7% of the assets (real estate and miscellaneous) is unduly understating expected performance. If a 10% return were assumed for these assets, the favorable spread of actual results to expected results would be reduced to 344 basis points. Perhaps the S&P 500, the Lehman Brothers Kuhn Loeb Index, and the average Treasury Bill are not representative of the type of stocks, bonds, and short-term investment vehicles used by college and universities. For example, perhaps the stocks held have different capitalizations and performance than those in the S&P 500, which is heavily weighted toward large capitalized stocks. Perhaps the bonds held were of different quality and maturity than the Lehman Brothers Kuhn Loeb Index. Perhaps the short-term cash investments were in bankers acceptances, certificates of deposit, commercial paper, or the Common Fund for Short-Term Investments, which might have produced a greater return than the Treasury rate. Whatever the reason for this good performance, such a comparison does take into account important constraints, such as a fixed income-to-equity ratio, placed on the manager by the institution's trustees. Therefore, it does appear significant value was added by management.

Table 9 shows that investment management also achieved a significant average annual incremental return of 2.24% for the three-year period ending June 30, 1981, and 1.93% for the five-year period.

Table 9

All Pools

Actual Returns Compared to Asset Component Returns
for the Five-Year and Three-Year Periods Ending June 30, 1981

	Actual Return	Expected Total Return	Difference
5 Years	9.06%	7.13%	1.93%
3 Years	12.49	10.25	2.24

Performance by Investment Objective

As can be seen in Table 4, page 9, for the one-year period ending June 30, 1981, the major broad market index for measuring stock performance (the S&P 500 Index) shows a significantly larger total return than did the major index for measuring bond performance (the Lehman Brothers-Kuhn Loeb Bond Index). Inasmuch as the pools with total return as an investment objective were on average 62.1% invested in stocks as compared to 51.1% for the pools with a balanced objective, and had a lower average bond exposure of 20.8% versus 30.6%, one would expect the total return pools to outperform the balanced pools. This, in fact, was the case for the year ending June 30, 1981. The total return pools had a total return of 18.19% as compared to 12.36% for the balanced pools--a difference of 5.83%. Applying the asset component analysis (as in Table 6), to each group of pools, one would expect the total return pools to show an 11.71% return and balanced pools a 8.04% return, a difference of 3.67%. Table 10 shows that on a risk-adjusted basis, total return pools appear to have performed 216 basis points better than balanced pools. Both total return and balanced pools exceeded expected returns by 648 and 432 basis points, respectively.

Table 10

Actual Returns Compared to Expected Total Returns for the One-Year Period Ending June 30, 1981

	Actual Return	Expected Total Return*	Difference
Total Return Pools	18.19%	11.71%	6.48%
Balanced or Income Pools	12.36	8.04	4.32
Difference	5.83%	3.67%	2.16%

*Calculated the same as in Table 6.

Over the three-year and five-year periods, as shown in Table 11, total return pools outperformed balanced pools on a nominal basis and in conformance with expected returns. Both group's actual returns were greater than expected by a wide margin. No calculations can be reached for the ten-year period because sufficient data on investment pool asset component percentages is not available.

Table 11

Total Return Pool and Balanced Pool
Actual Returns Compared to Expected Total Returns
for the Five-Year and Three-Year Periods Ending June 30, 1981

5 Year	Actual Return	Expected Total Return *	Difference
Total Return Pools	10.00%	7.67%	2.33%
Balanced or Income Pools	8.47	6.74	1.73
Difference	.56%	.93%	.60%
3 Year			
Total Return Pools	14.19%	11.54%	2.65%
Balanced or Income Pools	11.44	9.39	2.05
Difference	2.75%	2.15%	.60%

*Calculated the same as in Table 6 for each year, and results compounded on an average annual basis.

Performance by Size

For the one-, three-, five-, and ten-year periods ended June 30, 1981, the over $50 million size group performed best, followed by the $10-$50 million group. For all four periods ended June 30, 1981, pools under $10 million underperformed the other pools.

Table 12 shows that for the one-, three-, and five-year periods, in terms of expected total returns based on asset mix, the over $50 million group outperformed the $10-$50 million group. Both larger-sized groups outperformed the under $10 million group by a relatively wide margin. Actual returns for all groups were greater than expected returns in all periods.

Table 12

Actual Returns Compared to Expected Total Returns By Endowment Size For the Five-Year and Three-Year Periods Ending June 30, 1981

5 Years	Actual Return	Expected Total Return *	Difference
Over $50 million	9.92%	7.45%	2.47%
$10 to $50 million	9.37	7.15	2.22
Under $10 million	7.57	6.60	0.97
3 Year			
Over $50 million	14.37%	11.01%	3.36%
$10 million to $50 million	12.76	10.41	2.35
Under $10 million	9.99	9.12	0.87
1 Year			
Over $50 million	16.61%	10.78%	5.83%
$10 to $50 million	15.27	9.73	5.54
Under $10 million	11.52	7.66	3.86

* Calculated the same as in Table 6 for each year, and results compounded on an average annual basis.

Performance Based on Equity Weightings

Because investment performance is heavily influenced by a pool's exposure to stocks, bonds, and other investment media, the 1981 CPS includes performance rankings based on three equity percentage classifications: those pools 70% or more in equities, those 55% to 70% in equities, and those under 55% in equities . Each investment pool's total return performance ranking grouped by average beginning and ending year percentage in equities is shown in Exhibit III. Table 13 shows the one-, three-, five-, and ten-year performance of each group and the respective average 1981 equity position of the median investment pool.

Table 13

Average Total Return Performance Based on Average Percentage in Equities

Average Percentage In Equities	1981 Number Of Pools	1981 Median Equity %	Period Ended June 30, 1981 One-Year	Three-Year	Five-Year	Ten-Year
70% or more	41	75%	20.58%	16.90%	11.61%	8.48%
55 - 70%	76	61	16.14	12.74	9.10	6.24
Under 55%	92	43	10.77	10.24	7.92	5.67
All Pools	209	56	14.64	12.49	9.06	6.45

A word of caution on Table 13--to the extent a significant number of investment pools were in a different equity category grouping in years prior to fiscal 1981, the performance figures for the three-, five-, and ten-year periods could be misleading. The one-year results, however, are clear; as expected, the greater the equity exposure the better the results.

This same caveat applies if prior to 1981 a pool changed investment objective or size.

Keeping Pace with Inflation

Another important consideration when evaluating an investment pool's performance is its ability to keep pace with inflation. Two benchmarks are included in the 1981 CPS, the Consumer Price Index ("CPI") and the Higher Education Price Index ("HEPI"). The one-, three-, five-, and ten-year compound increases are shown in Table 4. For the one- and three-year periods, overall investment pool performance has outpaced these two indexes, but slipped behind the CPI for the five years and behind both the CPI and HEPI for the 10 year period.

Equity Only and Bond Only Performance

The 1977 CPS marked the first time NACUBO reported equity only and bond only performance. Separate data was provided on the equity portion of 24 pools and on the bond portion of 16 pools. For the 1978 CPS the number of participating equity and bond pools remained about the same, and for the 1979 and 1980 study equity pools and bond pools increased gradually. There are 35 equity pools and 27 bond pools in the 1981 study. The performance of these pools is shown on Table 14. This table shows that 20 equity pools (57%) outperformed the S&P 500 and 23 (66%) outperformed the Dow-Jones Industrial Average. All bond pools outperformed the bond indices. The tables on pages 105 and 106 show the respective three-year and five-year performance for stock only and bond only pools.

Table 14

Equity Only and Bond Only Performance Comparison For The One-Year Period Ending June 30, 1981

	Equity Only			Bond Only	
	Code Name	Total Return		Code Name	Total Return
1	EQUITY 15	39.91%	1	COM-FDEQ	29.49%
2	EQUITY 30	39.41	2	SP500	20.86
3	EQUITY 28	37.55	3	SP-IND	20.63
4	EQUITY 23	33.02	4	D-JONES	19.39
5	EQUITY 9	32.22	5	BOND 1	11.67
6	EQUITY 25	31.03	6	BOND 17	10.60
7	EQUITY 13	29.51	7	BOND 19	10.59
8	COM-FDEQ	29.49	8	BOND 20	8.78
9	EQUITY 17	28.62	9	BOND 24	7.65
10	EQUITY 33	26.85	10	BOND 10	5.28
11	EQUITY 5	26.63	11	BOND 16	3.35
12	EQUITY 20	26.39	12	BOND 14	3.31
13	EQUITY 22	26.10	13	BOND 2	2.31
14	EQUITY 10	25.64	14	BOND 21	1.49
15	EQUITY 31	25.58	15	BOND 27	0.50
16	EQUITY 12	25.27	16	BOND 12	-0.17
17	EQUITY 6	24.06	17	BOND 25	-0.27
18	EQUITY 7	22.55	18	BOND 15	-0.66
19	EQUITY 3	21.70	19	BOND 18	-2.67
20	EQUITY 35	21.67	20	BOND 5	-2.95
21	EQUITY 32	21.55	21	BOND 9	-3.03
22	SP500	20.86	22	BOND 11	-3.48
23	SP-IND	20.63	23	BOND 13	-4.27
24	EQUITY 24	20.05	24	BOND 8	-4.27
25	EQUITY 8	19.83	25	BOND 7	-4.75
26	EQUITY 21	19.51	26	BOND 22	-5.67
27	D-JONES	19.39	27	BOND 4	-5.82
28	EQUITY 18	19.26	28	BOND 23	-7.24
29	EQUITY 27	17.93	29	BOND 3	-7.76
30	EQUITY 14	16.81	30	BOND 26	-9.05
31	EQUITY 29	16.19	31	LEH-KUHN	-9.53
32	EQUITY 26	15.63	32	COM-FDBD	-9.90
33	EQUITY 11	15.30	33	BOND 6	-11.63
34	EQUITY 34	14.20	34	SALOMON	-14.11
35	EQUITY 1	10.85			
36	EQUITY 19	9.70			
37	EQUITY 2	6.47			
38	EQUITY 16	4.91			
39	EQUITY 4	4.78			
40	LEH-KUHN	-9.53			
41	COM-FDBD	-9.90			
42	SALOMON	-14.11			
AVERAGE OF 35 POOLS		22.19%	AVERAGE OF 27 POOLS		-0.30%

Internal Investment Management Performance

Of the 209 investment pools in the 1981 Comparative Performance Study, 27 are managed internally. The size of these pools is shown in Table 15.

Table 15

Investment Pools with Internal Investment Management (By Size)

Pool Size (Market Value)	Number in Each Group
Greater than $100 million	9
$50 million to $100 million	3
$25 to $50 million	4
$10 to $25 million	4
$5 to $10 million	3
Under $5 million	4
TOTAL	27

The one-year total return for the 27 pools managed internally was 12.46%, significantly below the 14.97% for the 182 pools managed externally. Last year the 32 pools managed internally had a return of 9.80% compared to 12.39% for the 166 managed externally. In 1979 the average return for pools managed internally was almost identical to that of those managed externally. In 1978 the return for internally managed pools was 3.66%, compared to 2.28% for the pools managed externally. In the 1977 CPS, the internally managed pools also outperformed the externally managed pools, 6.05% compared to 4.88%.

The 1981 average asset components of internally and externally managed pools are shown in Table 16. Because of their higher equity positions, it would be expected that over the long term externally managed pools would perform better. This did appear to be the case for the one year 1981. Based on their respective asset components, the expected performance for internal pools was 10.22% and for external pools, 10.80%. Both groups performed better than might be expected--internal pools by 2.24 percentage points (12.46-10.22%) and external pools by 4.17 percentage points (14.97-10.80%).

Table 16

Average Asset Composition of Internally and Externally Managed Investment Pools for Fiscal 1981

	Internally Managed	Externally Managed
Stocks	50.9%	56.1%
Bonds	26.9	26.6
Cash	16.7	12.6
Real Estate	2.8	2.1
Miscellaneous	2.7	2.6
TOTAL	100.0%	100.0%

A one-year review of the performance of the 12 largest internally managed pools, those over $50 million, showed a return of 13.26% compared to 11.82% for the 15 pools under $50 million in size. Based on their respective asset composition (as shown in Table 16A) the larger pools performed 1.98 percentage points (13.26% - 11.28%) above what might be expected, and the smaller pools 2.52 percentage points (11.82% - 9.30%) above.

Table 16A

Average Asset Composition of Largest and Smallest Internally Managed Investment Pools for Fiscal 1981

	Over $50 Million	Under $50 Million
Stocks	57.0%	45.6%
Bonds	26.3	27.4
Cash	14.6	18.5
Real Estate	1.4	4.1
Miscellaneous	.7	4.4
TOTAL	100.0%	100.0%

ASSET COMPOSITION

Summary

Table 17 shows the asset composition of the investment pools as of June 30, 1981. On the average 57.6% of the assets of pooled funds was invested in stocks and 25.0% in bonds. As one would expect, the pools with a total return investment objective were more heavily invested in stocks (64.5%) than were balanced fund pools (53.2%). It can also be seen that the larger sized pools had greater amounts invested in stocks than did the smaller pools.

Table 17

Asset Composition of Pools by Size and Type at June 30, 1981

		By Investment Objective		By Size		
	All Pools	Total Return	Balanced	Over $50 Million	$10 to $50 Million	Under $10 Million
Stocks	57.6%	64.5%	53.2	61.9%	57.6%	52.6%
Bonds	25.0	19.4	28.5	21.3	23.8	30.9
Cash	12.6	12.1	12.9	11.0	12.4	14.6
Real Estate	2.2	1.3	2.8	2.9	2.9	.6
Miscellaneous	2.6	2.7	2.6	2.9	3.3	1.3
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

For the most recent five years, 1977 through 1981, the average asset composition by size and investment type is shown in Table 18.

Table 18

Average Asset Composition of Pools by Size and Type From Fiscal 1977 to Fiscal 1981

Pools Over $50 Million	Stock	Bond	Cash	Real Estate	Misc.	Total
1981	60.2%	23.0%	11.3%	2.7%	2.8%	100.0%
1980	57.5	25.3	12.0	2.0	3.2	100.0
1979	59.9	25.5	11.4	N/A	3.2	100.0
1978	60.2	26.3	10.0	N/A	4.5	100.0
1977	61.8	26.3	7.7	N/A	4.2	100.0
5 Year Average	59.9	25.3	10.5	N/C	N/C	100.0
3 Year Average	59.2	24.6	11.6	N/C	N/C	100.0
Pools $10 to $50 Million						
1981	55.9	25.4	12.6	2.8	3.3	100.0
1980	54.0	26.3	13.4	2.4	3.9	100.0
1979	54.1	27.2	14.3	N/A	4.4	100.0
1978	56.6	28.5	10.4	N/A	4.5	100.0
1977	61.3	27.0	7.0	N/A	4.7	100.0
5 Year Average	56.4	26.9	11.5	N/C	N/C	100.0
3 Year Average	54.7	26.3	13.4	N/C	N/C	100.0
Pools Unver $10 Million						
1981	49.1	33.0	16.0	.6	1.3	100.0
1980	42.4	35.9	19.3	.2	2.2	100.0
1979	43.8	38.4	15.7	N/A	2.1	100.0
1978	51.9	35.2	11.1	N/A	1.8	100.0
1977	55.1	33.3	9.2	N/A	2.4	100.0
5 Year Average	48.5	35.2	14.3	N/C	N/C	100.0
3 Year Average	45.1	35.8	17.0	N/C	N/C	100.0
Total Return Pools						
1981	62.1	20.8	13.0	1.3	2.8	100.0
1980	58.1	22.8	15.5	1.2	2.4	100.0
1979	60.0	22.5	14.9	N/A	2.6	100.0
1978	64.3	23.0	9.9	N/A	2.8	100.0
1977	67.5	22.0	7.2	N/A	3.3	100.0
5 Year Average	62.4	22.2	12.1	N/C	N/C	100.0
3 Year Average	60.1	22.0	14.5	N/C	N/C	100.0
Balanced or Income Pools						
1981	51.1	30.6	13.1	2.7	2.5	100.0
1980	47.5	32.7	14.1	2.0	3.7	100.0
1979	48.6	34.1	13.6	N/A	3.7	100.0
1978	51.6	34.0	10.7	N/A	3.7	100.0
1977	56.3	32.9	8.3	N/A	2.5	100.0
5 Year Average	51.0	38.9	12.0	N/C	N/C	100.0
3 Year Average	49.1	32.5	13.6	N/C	N/C	100.0

N/A - Not Available
N/C - Not Calculated

Shifts in Investments

The net change in asset composition over the year results from a combination of two factors. The first is a change in stock, bond, and other asset prices; the second is a shift in investments. Tables 19 through 21 show the estimated shift in investments made by management decisions for all pools, and for pools grouped by size and investment objective. To the June 30, 1980, asset composition figures is applied the change in market price of each type of investment to arrive at projected asset composition figures for June 30, 1981. The actual composition amounts are then subtracted from the projected amounts to arrive at the net change caused by shifts in investments. The increase of 14.88% in the market price of the S&P 500 Index is used to arrive at the projected stock figure, while the decrease of 18.54% in market price of the Lehman Brothers-Kuhn Loeb Broad Based Bond Index is used to arrive at the projected bond figure.* The projections assume no market price change for cash, real estate, or miscellaneous assets. While these computations do not provide a precise measurement of shifts in investments, they do provide estimates which can be studied.

Table 19

Change in Asset Composition Caused by Shifts in Investments -- All Pools

	June 30, 1980	June 30, 1981		
	Actual	Predicted	Actual	Difference
Stocks	53.2%	59.6%	57.6%	-2.0%
Bonds	28.4	25.0	25.0	2.4
Cash	13.7	12.6	12.6	-.7
Real Estate	2.1	2.2	2.2	.2
Miscellaneous	2.6	2.6	2.6	.1
TOTAL	100.0%	100.0%	100.0%	

Table 20

Change in Asset Composition Caused by Shifts in Investments All Pools 1974-1981

Percent Change -- Year Ended June 30

	1974	1975	1976	1977	1978	1979	1980	1981	Total
Stocks	-4.0%	-1.2%	-2.2%	-1.1%	-4.8%	-3.3%	-2.3%	-2.0%	-20.9%
Bonds	1.3	3.9	4.2	0	0.6	1.3	2.6	2.4	16.3
Cash	3.0	-2.9	-1.7	1.0	4.2	1.9	-0.6	-0.7	4.2
Real Estate	N/A	N/A	N/A	N/A	N/A	N/A	0.4	0.2	0.6
Miscellaneous	-0.3	0.2	-0.3	0.1	0	0.1	-0.1	0.1	-0.2

*In previous years the Salomon Brothers High-Grade Long-Term Bond Index was used.

Table 21

Change in Asset Composition Caused by Shifts In Investments by Size and Type

Percent Change -- 1974 through 1981

Total Return	1974	1975	1976	1977	1978	1979	1980	1981	Total
Stock	-5.1%	-0.5%	-3.7%	-0.2%	-6.2%	-4.2%	-1.5%	-0.8%	-22.2%
Bond	0.1	2.6	5.8	0.2	1.7	1.5	1.0	2.2	15.1
Cash	5.0	-2.7	-1.4	0.5	4.6	1.8	0.7	-1.3	7.2
Real Estate	N/A	N/A	N/A	N/A	N/A	N/A	0.3	0.1	0.4
Miscellaneous	0	0.6	-0.7	-0.5	-0.1	0.9	-0.5	-0.2	-0.5
Balanced									
Stock	-3.5	-1.9	-1.4	-1.4	-4.1	-2.8	-3.0	-2.3	-20.4
Bond	2.0	4.7	3.3	-0.2	0	0.9	3.9	2.3	16.9
Cash	1.9	-2.8	-1.4	1.3	4.1	2.0	-1.4	-0.3	3.0
Real Estate	N/A	N/A	N/A	N/A	N/A	N/A	0.5	0.1	0.6
Miscellaneous	-0.4	0	-0.1	0.3	0	-0.1	0	0.2	-0.1
Over $50 Million									
Stock	-4.5	-1.9	-1.3	-0.5	-1.5	-1.8	-2.9	-2.6	-17.0
Bond	-0.1	5.1	1.3	-0.9	-1.1	1.2	3.1	2.0	10.6
Cash	4.7	-3.4	-1.4	1.7	2.7	0.7	-0.7	-0.1	4.2
Real Estate	N/A	N/A	N/A	N/A	N/A	N/A	0.7	0.5	1.2
Miscellaneous	-0.1	0.2	1.4	-0.3	-0.1	-0.1	-0.2	0.2	1.0
$10 to $50 Million									
Stock	-3.5	-2.9	-1.6	-0.9	-6.3	-2.6	-2.7	-2.7	-22.1
Bond	0.5	4.3	4.3	-0.9	1.7	0.7	2.4	2.4	15.1
Cash	3.6	-2.1	-1.4	1.5	4.8	1.3	0.1	0.1	8.0
Real Estate	N/A	N/A	N/A	N/A	N/A	N/A	0.2	0.2	0.7
Miscellaneous	-0.6	0.7	-1.3	0.3	-0.2	0.6	0	0	- 1.7
Under $10 Million									
Stock	-4.2	0.2	-3.4	-1.7	-5.1	-5.2	0.3	0.3	-21.9
Bond	2.1	2.9	5.7	1.6	0.4	1.7	2.4	2.4	19.6
Cash	2.2	-3.0	-1.8	0.2	4.7	3.5	-2.7	-2.7	1.3
Real Estate	N/A	N/A	N/A	N/A	N/A	N/A	0	0	0.2
Miscellaneous	-0.1	-0.1	-0.5	-0.1	0	0	0	0	0.8

Shifts in Investments from 1974 through 1981

Since 1974 when NACUBO began gathering data on shifts in investments, endowment investment pools have been continuously decreasing their exposure to stocks, as shown in Table 20. Conversely, every year pools have increased their bond exposure, except for 1977 when it appeared that no shifting in bonds occurred. In retrospect, as shown in Table 22 this generally proved unfavorable. In all years except 1974 and 1977 stocks outperformed bonds. In regard to shifting cash, endowment investment pools would have been best served if cash had been increased in 1974 and 1978, and this was in fact the case.

Table 22

Yearly Total Return for One-Year Treasuries, the Salomon Brothers Index, and the S&P 500

Fiscal Year	Average One Year Treasury	Salomon Brothers Bond Index	S&P 500 Index
1981	12.98%	-14.11%	20.86%
1980	11.42	-3.66	17.13
1979	9.85	6.75	13.47
1978	6.49	- .97	- .16
1977	5.57	14.65	.46
1976	6.54	10.08	13.81
1975	7.48	14.51	15.22
1974	8.03	-7.46	-14.48

Distribution of Asset Composition

Table 23 shows the asset composition distribution for all pools by investment objective and size.

Table 23

Distribution of Asset Composition as of June 30, 1981

	By Objective			By Size		
	All Pools	Total Return	Income or Balanced	Over $50 Million	$10 to $50 Million	Under $10 Million
Percent Invested in Stocks						
90-100%	3	3	0	2	0	1
80-90%	10	8	2	3	6	1
70-80%	33	15	18	12	16	5
60-70%	58	31	27	20	24	14
50-60%	49	15	34	16	20	13
40-50%	24	6	18	6	8	10
30-40%	18	2	16	2	9	7
0-30%	14	2	12	1	7	6
TOTAL	209	82	127	62	90	57
Percent Invested in Bonds						
90-100%	0	0	0	0	0	0
80-90%	0	0	0	0	0	0
70-80%	2	0	2	0	1	1
60-70%	1	0	1	0	0	1
50-60%	5	2	3	0	2	3
40-50%	23	4	19	2	9	12
30-40%	31	7	24	9	11	11
20-30%	67	25	42	21	29	17
10-20%	50	23	27	20	24	6
0-10%	30	21	9	10	14	6
TOTAL	209	82	127	62	90	57

Asset Diversification

In general, investment pools tended to hold more positions in stocks than bonds. As shown in Table 24 the smallest group had the smallest ratio of the number of stocks to bonds. Also, total return pools tended to have stock positions (56 holdings) about two and one-half times their bond positions (23 holdings), and balanced pools tended to have stock positions about one and one-half times their equity positions.

The total distribution of bond and stock positions for all pools and for the different size categories is portrayed in Graph II on pages 30 and 31.

Table 24

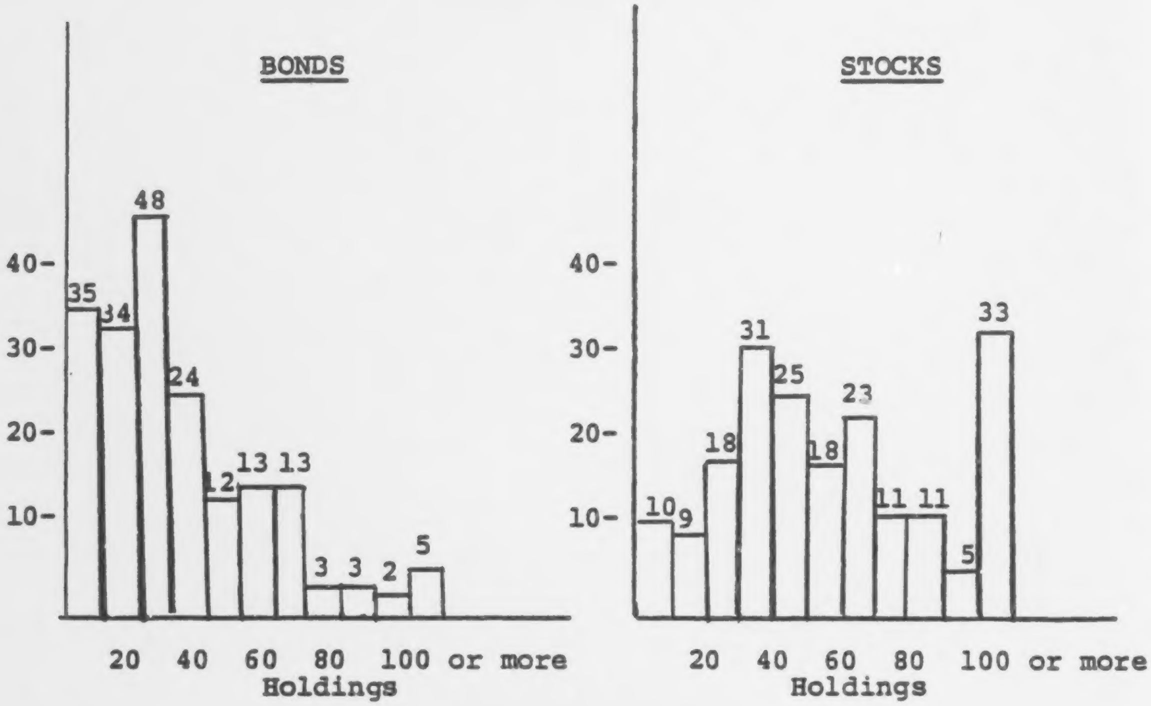
Asset Diversification for Bonds and Stocks as of June 30, 1981

	Median Number of Bonds Held	Median Number of Stocks Held
All Pools	27	53
By Investment Objective:		
Total Return	23	56
Balanced	30	48
By Size:		
Over $50 million	38	97
$10 to 50 million	26	53
Under $10 million	18	32

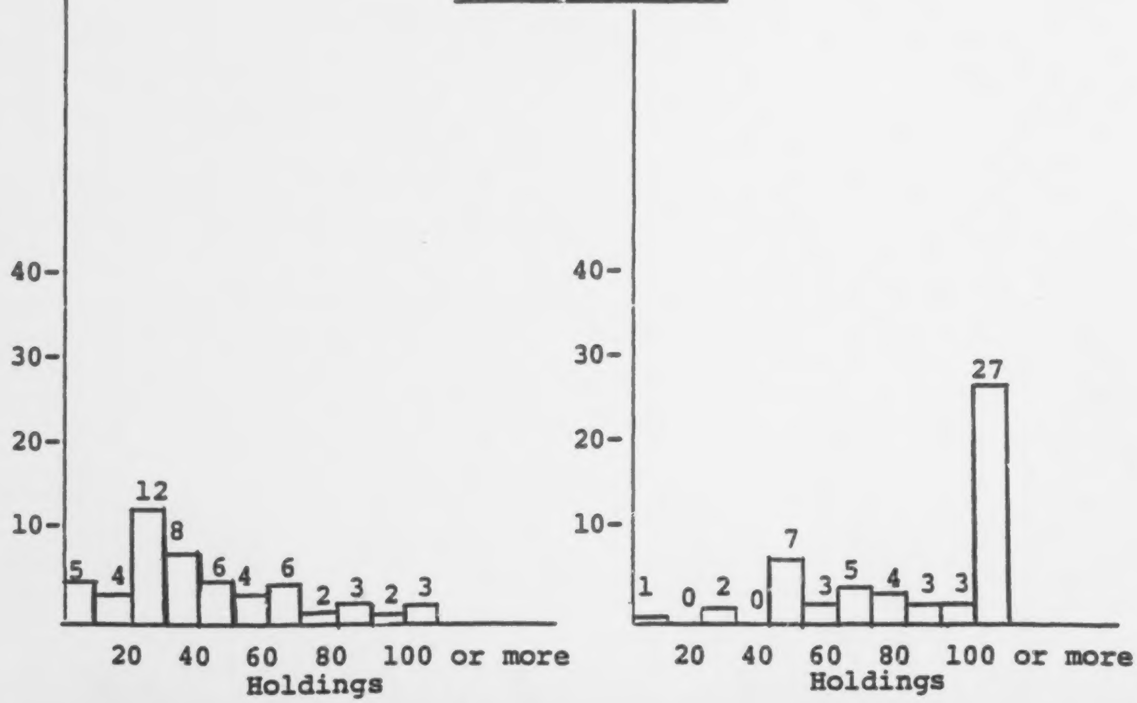
GRAPH II

Asset Diversification
(1980-81)

ALL POOLS

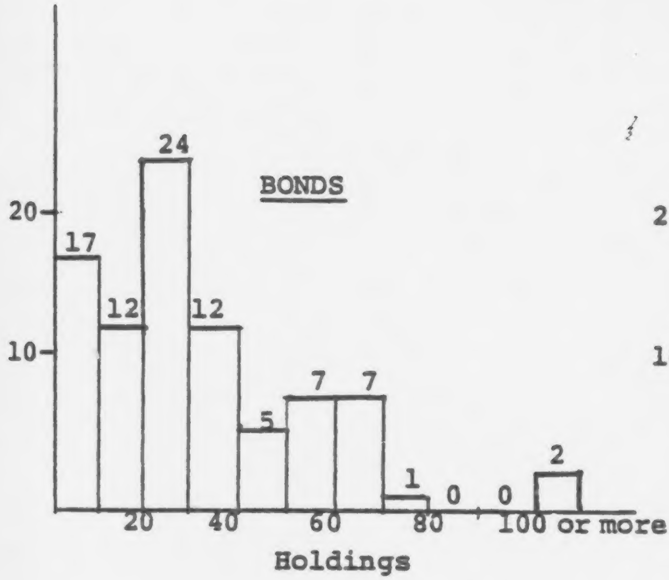


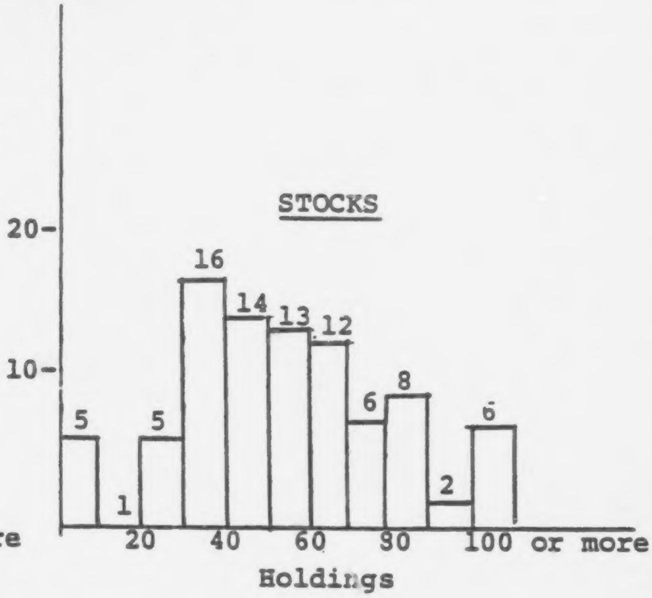
OVER $50 MILLION



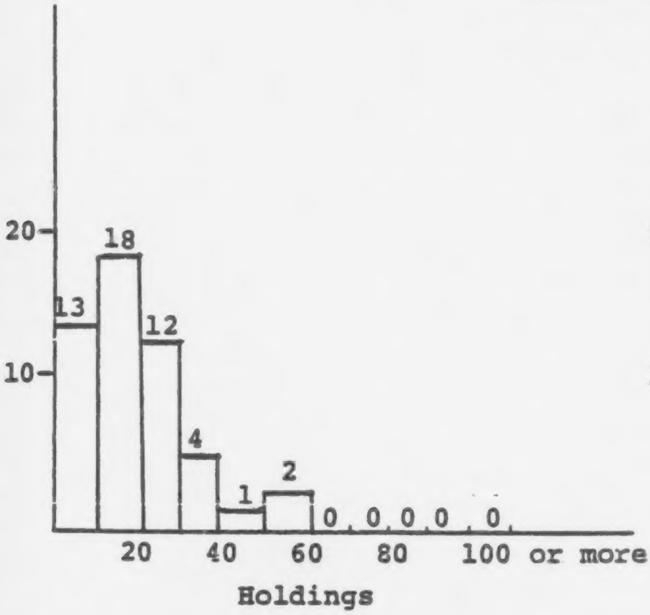
GRAPH II
(Cont.)

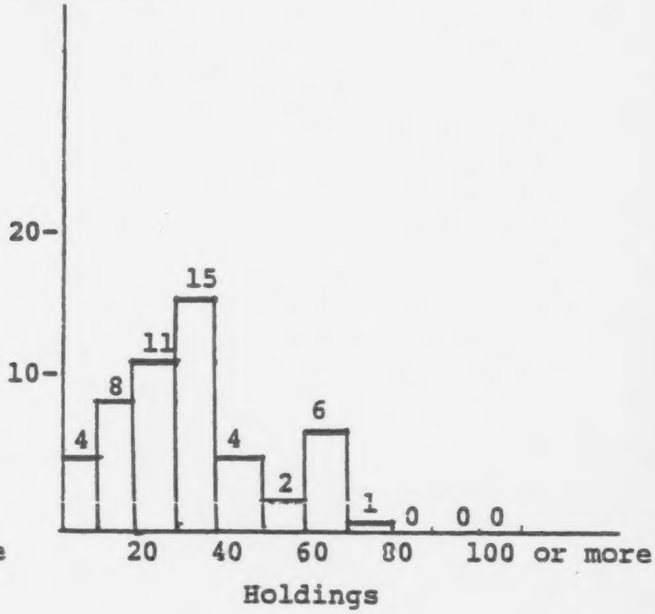
Asset Diversification
$10-$50 Million





Under $10 Million





Equity Price Earnings Ratio - "P/E"

Institutions were asked on an optional basis to provide the price earnings ratio (P/E) for the equity portion of their investment pools as of June 30, 1981. The average P/E for 39 pools was 9.7 compared to 7.7 for the Dow-Jones and 8.7 for the S&P 500.

Non-Controllable Assets

Non-controllable assets are those which although included in investment pools are not truly marketable or not included in the pool solely on their investment merit, i.e., investment in a dormitory, investment letter stock, donor restricted stock, etc.

Of the 209 pools, 175 (84%) had non-controllable assets of 5% or less, 22 had non-controllable assets of between 5% and 15%, 6 between 15% and 25%, and 6 had non-controllable assets of greater than 25%. Non-controllable assets for all pools represented 2.7% of the total assets of the pools as of June 30, 1981.

RISK MEASUREMENT AND RETURN

Description

There presently remains considerable controversy as to whether superior investment managers do exist and hence can produce an incremental return relative to the amount of risk taken, or whether the only way above average long-run return can be achieved is by assuming greater risks. Risk is defined as a greater variability in return. A particular risk measure now widely used is an index of relative volatility, which is also known by the Greek letter "beta." The beta calculation or risk is essentially a comparison between the movements of returns from the market as a whole.*

Volatility as a measurement of risk was introduced into the Comparative Performance Study in 1975 and has been contained therein since that time. In calculating such statistical measures, reliability is higher when information is gathered over a long period of time. Although more accuracy would be achieved by using quarterly data, the data used in this study provides reasonably reliable results if there is adequate diversification of investment pool assets, and the asset composition return is similar to what might be expected. That is, stocks are more risky than bonds, and bonds are more risky than Treasury Bills. Correspondingly, in up markets stocks should do better and Treasury Bills worse, and in down markets just the opposite should occur.

In a regression analysis an investment pool's beta measure is the percentage fluctuation that can be expected and therefore predicted based on the performance of the stock market. Generally, the S&P 500 Index is used as the market base. A beta of 1 means that a pool should move in unison with the market. If the market goes up 10%, the pools should go up 10%. A beta of more than 1, say 1.10, means the pool is 10% more volatile. When the market goes up, a more volatile pool should perform better than the market; it should perform worse when the market goes down. On the other hand, a pool that is less volatile (lower beta) should not perform as well in an up market but not lose as much in a down market. Any change in value will vary from that predicted by the beta measure if, and to the extent that, a pool is not thoroughly diversified and therefore exhibits distinct, unique characteristics not correlated to the market in general.

---

*Managing Risk In An Uncertain Era, Malkiel & Firstenberg, Princeton University Press, 1976.

Observations

Table 25 shows beta coefficients calculated for the investment pools in this year's CPS and in previous years. College and university endowment funds appear to be invested for less volatility and risk than the market as a whole. One would expect their performance to be below that of the stock market as a whole in a period of a rising market as was the case in fiscal 1975, 1976, 1979, 1980, and 1981 and above the stock market in a period of declining market as was the case in fiscal 1977 and 1978. As shown in Table 26, total return pools are more volatile (greater beta) than balanced pools, and the larger the size of pools the more volatile. This seems logical since total return pools and larger pools have greater stock components, and stocks have historically been more volatile than bonds.

Table 25

Comparative Performance Study
Historic Beta of All Investment Pools

10 Years Ending June 30	10 Year Beta
1975	.69
1976	.72
1977	.71
1978	.73
1979	.72
1980	.70
1981	.72

Table 26

Beta Coefficients

	Ten Years Ending June 30, 1981
By Investment Objective:	
Total Return Pools	.79
Balanced Pools	.66
By Size:	
Over $50 million	.77
$10 to $50 million	.71
Under $10 million	.65
Comparative Indices:	
Dow-Jones Industrial Average	.81
Salomon Brothers Bond Index	.05
S&P 500	1.00

STOCK AND BOND TURNOVER

Method of Calculation

Turnover, as reported in this study, is determined by dividing the lesser of stock purchases or sales by the average of the beginning and ending year market values of stocks. For example, a portfolio with $80 million in stocks at June 30, 1980, and $100 million at June 30, 1981, that purchased during the year $25 million in stocks and sold $18 million, would have had a turnover of 20% -- $18 million in sales divided by $90 million. This same methodology is used for bond turnover.

1981 Stock Turnover

For all institutions, 1981 stock turnover of 28.0% was the highest since NACUBO began gathering this data in 1974-75, as shown in Table 27. This is also the case when pools are grouped by investment objective or by size. In 1981, and in six of the last seven years, turnover for total return pools has been greater than for balanced pools. Based on size, the smallest group has had the least equity turnover in 1981 and also in five of the last six years.

1981 Bond Turnover

This is only the fourth year NACUBO has been gathering data on bond turnover. For both 1978 and 1979 turnover of balanced pools was about twice the turnover of total return pools. In 1980 the reverse was the case: turnover of total return pools was twice that of balanced pools. In 1981 the turnover of both was equal. The larger the size group of pools, generally the greater the turnover. This has proved a consistent pattern for all four years for the largest sized group. Pools over $50 million in size had about two times the turnover of pools between $10 and $50 million in size, and pools between $10 and $50 million had greater turnover than pools under $10 million--except in 1981 when the turnover of these two groups was about equal.

Table 27

Stock Turnover

	Median Response							1980-81
	1974-1975	1975-1976	1976-1977	1977-1978	1978-1979	1979-1980	1980-1981	Number Responding
All Pools	17.0%	16.1%	15.1%	14.3%	18.0%	21.7%	28.0%	171
By Investment Objective:								
Total Return Pools	17.4	16.1	15.1	17.0	24.3	28.0	38.0	63
Balanced Pools	16.5	15.8	16.1	13.5	16.4	20.0	23.9	108
By Size:								
Over $50 million	19.7	15.4	15.0	15.3	20.5	26.4	28.5	48
$10 to $50 million	17.0	15.5	20.8	17.0	19.0	22.3	30.0	78
Under $10 million	14.4	18.0	11.4	12.0	15.8	18.0	23.9	45
Bond Turnover								
All Pools				13.7	15.5	15.0	15.8	163
By Investment Objective:								
Total Return Pools				9.6	18.5	26.4	15.8	56
Balanced Pools				20.0	33.8	12.5	15.8	107
By Size:								
Over $50 million				28.4	48.8	26.0	20.4	48
$10 to $50 million				12.4	13.0	14.0	13.0	72
Under $10 million				7.7	10.9	10.6	14.8	43

Stock and Bond Turnover and Performance Implications

For 1981, the 25 pools with the highest stock turnover ratios and the 25 pools with the lowest turnover ratios had identical performance of 15.2%. The 25 pools with the highest bond turnover outperformed the 25 pools with the lowest turnover by almost 2 percentage points. This year's and prior years' findings are shown in Table 28. The 1981 results of the 25 pools with the highest and lowest stock and bond turnover are shown in Tables 29 and 30, respectively.

Table 28

Performance Comparison of the 25 Pools with the Highest and Lowest Stock and Bond Turnover Percentages

Stock Pools

	25 Highest	25 Lowest	Basis Point Difference
1981	15.26%	15.26%	0
1980	12.90	10.38	252
1979	11.23	10.16	107
1978	3.71	1.69	202
1977	4.60	3.29	131
1976	9.84	8.26	158

Bond Pools

1981	12.45	10.70	175
1980	11.22	9.20	201
1979	10.47	8.21	226
1978	2.34	2.55	-21

Table 29

Pools with the Highest and Lowest Equity Turnover Percentage* for the One-Year Period Ending June 30, 1981, Ranked According to Average Total Return

Highest Turnover				Lowest Turnover			
Rank	Code Name	1981 Turnover Percent	1981 Average Total Return	Rank	Code Name	1981 Turnover Percent	1981 Average Total Return
1	C66	114.0%	29.50%	1	COM-FDEQ		29.48%
2	COM-FDEQ		29.49	2	E12	1.9%	27.74
3	E98	70.8	25.26	3	E26	12.0	25.85
4	C14	235.0	22.16	4	E20	9.0	22.98
5	SP500		20.86	5	C65	12.1	21.68
6	C100	97.8	20.80	6	C43	1.1	21.58
7	E64	123.0	20.77	7	SP500		20.86
8	SP-IND		20.63	8	SP-IND		20.63
9	E4	81.0	20.50	9	C55	5.3	20.35
10	D-JONES		19.39	10	C15	7.0	20.14
11	E27	83.5	19.36	11	E42	7.8	20.13
12	E10	81.0	17.72	12	D-JONES		19.39
13	E63	163.0	16.62	13	C45	10.0	18.69
14	C13	79.5	16.22	14	E21	0	17.01
15	C57	69.0	16.13	15	C77	8.5	16.53
16	E91	184.2	15.86	16	C99	2.4	16.34
17	E56	62.6	15.50	17	E79	12.0	14.77
18	C2	97.0	14.86	18	C95	12.3	13.77
19	E70	92.0	13.55	19	C38	6.6	13.59
20	C30	77.0	13.50	20	E44	0	13.17
21	C29	80.0	12.01	21	E107	5.0	13.05
22	E99	73.0	11.63	22	E67	11.4	12.11
23	C26	133.3	11.36	23	C86	4.3	10.69
24	E89	63.9	11.30	24	C101	3.8	10.48
25	E86	162.4	8.69	25	C78	9.6	8.17
26	E106	62.6	8.50	26	C19	.7	7.43
27	E13	110.0	7.48	27	C81	11.3	6.09
28	C73	74.8	7.17	28	C59	1.0	4.75
29	E41	69.0	5.07	29	C61	6.3	4.31
30	LEH-KUHN		-9.53	30	LEH-KUHN		-9.53
31	COM-FDBD		-9.90	31	COM-FDBD		-9.90
32	SALOMON		-14.11	32	SALOMON		-14.11
Arithmetic Average of 25 Pools		101.6%	15.26%	Arithmetic Average of 25 Pools		6.5%	15.26%

*NOTE: All pools included in this analysis had an equity component of at least 35%.

Table 30

Pools with the Highest and Lowest Bond Turnover Percentage* for the One-Year Period Ending June 30, 1980, Ranked According to Average Total Return

Highest Turnover				Lowest Turnover			
Rank	Code Name	1981 Turnover Percent	1981 Average Total Return	Rank	Code Name	1981 Turnover Percent	1981 Average Total Return
1	COM-FDEQ		29.49%	1	E75	1.5%	31.06%
2	E58	72.5%	25.21	2	E50	0	29.57
3	SP500		20.86	3	COM-FDEQ		29.49
4	E64	197.0	20.77	4	E6	0.5	21.44
5	SP-IND		20.63	5	SP500		20.86
6	D-JONES		19.39	6	SP-IND		20.63
7	E27	89.3	19.36	7	D-JONES		19.39
8	C25	72.1	18.98	8	E21	0	17.01
9	E61	162.0	18.84	9	C98	0	16.13
10	E55	111.0	15.30	10	C52	3.9	13.63
11	E68	56.0	14.29	11	C38	0	13.59
12	E76	104.9	14.03	12	E70	0	13.55
13	E108	100.0	13.93	13	C51	0	13.52
14	E47	149.5	12.94	14	E107	0	13.05
15	C17	66.5	12.93	15	C16	0	10.28
16	E9	51.1	11.95	16	C27	1.7	10.07
17	C60	121.8	11.83	17	C20	0	9.54
18	E2	71.4	11.33	18	C3	0	8.54
19	E57	328.3	11.18	19	C19	0.7	7.43
20	E84	366.9	11.09	20	C47	1.7	6.56
21	C6	247.3	9.62	21	C33	0	5.43
22	E32	53.0	9.61	22	C59	0.4	4.75
23	C39	264.1	9.46	23	E22	2.5	4.54
24	E77	165.5	8.91	24	C67	0	4.53
25	E106	67.2	8.50	25	C61	0	4.31
26	E92	130.0	7.92	26	C90	0	3.02
27	E17	124.0	7.58	27	C69	0	2.44
28	E41	104.0	5.07	28	C85	0	1.74
29	C32	52.0	0.51	29	C84	0	1.72
30	LEH-KUHN		-9.53	30	LEH-KUHN		-9.53
31	COM-FDBD		-9.90	31	COM-FDBD		-9.90
32	SALOMON		-14.11	32	SALOMON		-14.11
Arithmetic Average of 25 Pools		133.1%	12.45%	Arithmetic Average of 25 Pools		0.5%	10.70%

*NOTE: All pools included in this analysis had a bond component of at least 20%.

INVESTMENT ADVISORY FEES AND DISCRETION

Investment Fees

The median fee for 176 responding institutions as shown in Table 31 was .29% and the average fee was .31%. (This represents over 95% of the 182 pools which use outside advisors; 27 pools are managed internally.) For those managers who have discretion and those who do not have discretion, economies of scale do seem to come into play as there is a differentiation in fees among the largest, middle-sized, and smallest pools.

Investment Discretion

Of 176 institutions, 18% indicated that they do not give their advisor discretion, and 82% indicated that they do give discretion. Last year the figures reported were 15% and 85%, respectively. The largest institutions are more likely to give their managers discretion. The results in Table 31 are consistent with those of prior studies in that those institutions which do not give discretion pay less than those which do. Table 32 shows the range of investment pool advisory fee responses.

Table 31

Advisory Fees Paid in 1980-81 as a Percent of Average Market Value, in Terms of Investment Discretion

	Number of Institutions	Arithmetic Average	Median Response
Give Discretion			
Over $50 million	42	.26	.26
$10 to $50 million	60	.36	.32
Under $10 million	42	.36	.35
Subtotal	144	.33	.31
Do Not Give Discretion			
Over $50 million	6	.17	.16
$10 to $50 million	20	.22	.21
Under $10 million	6	.30	.31
Subtotal	32	.22	.22
TOTAL	176	.31	.29

Table 32

Range of Responses of Investment Pool Advisory Fees Paid as a Percentage of Average Market Value in 1980-81

Investment Pools With Manager Discretion
(In Millions)

	Under $5	$5-$10	$10-$25	$25-$50	$50-$100	Over $100	All Pools
Less than .1%	0	1	0	2	1	1	5
.10 to .15%	0	1	0	2	1	2	6
.15 to .20%	2	1	1	3	3	3	13
.20 to .25%	4	1	6	3	3	6	23
.25 to .30%	2	3	6	4	4	5	24
.30 to .35%	3	5	7	1	4	4	24
.35 to .40%	3	5	5	2	0	1	16
.40 to .45%	1	2	2	1	2	0	8
.45 to .50%	0	2	1	1	0	1	5
.50 to .60%	1	1	7	0	1	0	10
.60 to .70%	1	1	2	2	0	0	6
More than .70%	1	1	0	2	0	0	4
TOTAL	18	24	37	23	19	23	144

Investment Pools Without Manager Discretion

	Under $5	$5-$10	$10-$25	$25-$50	$50-$100	Over $100	All Pools
Less than .1%	1	0	2	1	1	0	5
.10 to .15%	0	0	0	1	0	2	3
.15 to .20%	0	0	2	4	1	0	7
.20 to .25%	0	1	2	2	2	0	7
.25 to .30%	1	0	4	0	0	0	5
.30 to .35%	1	0	0	1	0	0	2
.35 to .40%	0	0	0	0	0	0	0
.40 to .45%	1	0	0	0	0	0	1
.45 to .50%	1	0	0	0	0	0	1
.50 to .60%	0	0	1	0	0	0	1
.60 to .70%	0	0	0	0	0	0	0
More than .70%	0	0	0	0	0	0	0
TOTAL	5	1	11	9	4	2	32

All Pools

	Under $5	$5-$10	$10-$25	$25-$50	$50-$100	Over $100	All Pools
Less than .1%	1	1	2	3	2	1	10
.10 to .15%	0	1	0	3	1	4	9
.15 to .20%	2	1	3	7	4	3	20
.20 to .25%	4	2	8	5	5	6	30
.25 to .30%	3	3	10	4	4	5	29
.30 to .35%	4	5	7	2	4	4	26
.35 to .40%	3	5	5	2	0	1	16
.40 to .45%	2	2	2	1	2	0	9
.45 to .50%	1	2	1	1	0	1	6
.50 to .60%	1	1	8	0	1	0	11
.60 to .70%	1	1	2	2	0	0	6
More than .70%	1	1	0	2	0	0	4
TOTAL	23	25	48	32	23	25	176

SECTION II -- ENDOWMENT CHARACTERISTICS

INTRODUCTION

As part of the ongoing Comparative Performance Study, NACUBO has built a data base of information concerning endowment funds and characteristics. Section II of this report includes information concerning endowment gift giving, endowment wealth, principal and income, spending, investment and custodial matters, option writing, venture capital, and the like.

GENERAL INFORMATION

Fiscal Year

Of the 192 institutions responding, 161 (84%) have fiscal years ending June 30; the next most frequent responses were the last days of May and August with 18 and 8, respectively. Only 2 used December 31, and the remaining 3 pools had varying dates throughout the year.

Endowment Distribution of Participants

The distribution of the 192 institutions reporting endowment size, inclusive of life income and similar funds, as of June 30, 1981, is categorized by the 78% independent and 22% public-supported institutions in Table 33.

Table 33

Endowment Size Distribution of 192 Independent and Public Institutions

	Independent	Public	Total	Percent of 192 Answering
Greater than $100 million	37	6	43	22%
$50 to $100 million	25	3	28	15
$25 to $50 million	25	9	34	18
$10 to $25 million	35	13	48	25
$5 to $10 million	20	5	25	13
Under $5 million	7	7	14	7
TOTAL	149	43	192	100%

It is interesting to note that the distribution by asset size of those reporting in the 1981 survey is markedly different from that of the 1974 survey as shown in Table 34. In the 1974 through 1981 surveys, the percentage of small institutions participating (those with market values under $10 million in size at the end of each fiscal year) declined from 43% to 20%. At the same time the number of institutions with larger endowments (those over $50 million) has increased from 22% to 37%.

Table 34

Endowment Size Percent Distribution of the 1974 through 1981 Surveys

	1974	1975	1976	1977	1978	1979	1980	1981
Greater than $50 million	22%	24%	29%	32%	33%	34%	34%	37%
$10 to $50 million	35	36	42	41	42	46	44	43
Under $10 million	43	40	29	27	25	20	22	20
TOTAL	100%	100%	100%	100%	100%	100%	100%	100%
Number Participating	145	147	138	148	144	147	176	192

Life Income Funds

Life income funds are those the income of which does not flow through to the institution during the lifetime of the donor or beneficiary, yet the principal of which has been designated as a remainder to the institution.

In Table 1, page 1 of Section I of this report, the dollar amount of life income funds for each institution reporting such information is indicated. The total market value at June 30, 1981, of life income funds of the 143 responding that they had such funds was $628 million. The 1978 survey indicated that there seemed to be major practical differences among institutions in regard to both life income fund investing and financial statement reporting. Of those institutions indicating that they had such funds, about one-third combined these funds with their endowment for investment purposes and about one-half for financial reporting purposes.

To the extent that institutions for financial report purposes include life income funds with endowment funds, wealth probably is being overstated since such assets are not currently earning revenue for the support of the institution.

Non-Security Assets

One hundred and twenty-eight institutions reported the portion of their total endowment invested in non-security assets. The composition of such assets varies among institutions, but typically this segment of the endowment contains employee mortgages which may be at "incentive rates" related to employment, and plant and facilities assets. The earnings from such assets are not typical, however, since they usually are set by the administration or the institution's trustees. In such instances, the return would constitute interest in the case of employee mortgages, room rent in the case of dormitories, transfer charges in the case of heating facilities, etc. The point to be made in regard to financial implications is that an institution with a heavy endowment commitment in non-security assets probably is less flexible in terms of its investment alternatives.

Where non-security assets represent a large portion of the total endowment, "true wealth" may be overstated. In terms of non-security assets, there does not seem to be much difference among the various endowment size groupings or between independent and public institutions. Table 35 shows the range of responses as of June 30, 1981.

Table 35

June 30, 1981
Non-Security Assets Percentage of Total Endowment*

Non-Security Assets as a Percentage of Endowment	Over $50 Million	$10-$50 Million	Under $10 Million	Independent Institutions	Public Institutions	All Institutions
Less than 1%	15	13	4	24	8	32
1 to 2%	4	7	1	12	0	12
2 to 2.5%	5	3	1	9	0	9
2.5 to 3%	2	1	2	4	1	5
3 to 3.5%	3	3	0	5	1	6
3.5 to 5%	2	2	1	3	2	5
5 to 6.5%	6	1	1	7	1	8
6.5 to 8%	5	6	1	10	2	12
8 to 10%	0	5	0	4	1	5
10 to 12.5%	7	2	0	7	2	9
12.5 to 15%	2	4	2	5	3	8
15 to 20%	4	2	0	6	0	6
20 to 25%	1	3	3	7	0	7
Greater than 25%	0	3	1	4	0	4
TOTAL	56	55	17	107	21	128
Median Response	3.3%	3.9%	4.4%	3.3%	4.0%	3.5%

*Including life income funds.

Non-Controllable Assets

Eighty-eight institutions indicated they had non-controllable assets as shown in Table 36. Of those reporting non-controllable assets, public institutions and those under $10 million had the greatest amount of non-controllable assets.

Table 36

June 30, 1981
Non-Controllable Assets Percentage of Total Endowment*

Percentage of Endowment	Over $50 Million	$10-$50 Million	Under $10 Million	Independent Institutions	Public Institutions	All Institutions
Less than 1%	10	12	2	20	4	24
1 to 2%	5	9	0	11	3	14
2 to 2.5%	5	1	0	6	0	6
2.5 to 3%	1	0	2	3	0	3
3 to 3.5	2	0	0	2	0	2
3.5 to 5%	4	4	2	10	0	10
5 to 6.5	2	4	1	4	3	7
6.5 to 8%	1	2	1	3	1	4
8 to 10%	2	1	1	4	0	4
10 to 12.5%	2	0	0	2	0	2
12.5 to 15%	0	1	0	1	0	1
15 to 20%	1	0	2	3	0	3
20 to 25%	0	3	0	3	0	3
Greater than 25%	0	2	3	2	3	5
TOTAL	35	39	14	74	14	88
Median Response	2.2%	1.7%	7.5%	2.5%	5.4%	2.5%

*Including life income funds.

GROWTH IN ENDOWMENT

Endowment Growth and Real Growth

The increased size of endowment funds in 1981 appears to be the result of new gifts added to endowment, and of appreciation in equity securities offsetting depreciation in the bond security markets. An approximation of endowment growth can be made for the eight-year period ending June 30, 1981. As a group, endowment funds at June 30, 1981, have increased about 40% since June 30, 1973, the first year NACUBO began to gather this data. However, in real terms, taking inflation into account, endowment funds since 1973 have actually declined in purchasing power 31.54% based on the Consumer Price Index ("CPI") and about 23.78% based on the Higher Education Price Index ("HEPI"). To help put this into perspective, Table 37 compares the S&P 500 Index, the Dow-Jones Industrial Average, the Salomon Brothers High-Grade Bond Index, and endowment funds both before and after inflation. The endowment fund figures are adjusted by both the CPI and the HEPI.

Table 37

Eight-Year Appreciation Comparison of Indices
Endowment Before and After Inflation*

Fiscal Year June 30	Dow-Jones	S&P 500	Salomon Brothers	Endowment Funds	Real Endowment Based On CPI	Real Endowment Based On HEPI*
1973	891.71	104.26	93.70	100.00	100.00	100.00
1974	802.41	86.00	80.53	83.30	76.49	77.48
1975	878.99	95.19	85.26	91.05	75.19	78.28
1976	1002.78	104.28	86.82	98.52	75.96	79.46
1977	916.30	100.48	92.43	102.36	74.60	77.52
1978	818.95	95.53	84.64	103.79	70.82	73.67
1979	841.98	102.91	83.15	112.09	68.94	73.80
1980	867.92	114.24	73.23	122.85	66.11	73.60
1981	976.88	131.24	56.43	139.31	68.46	76.22
8-Year Percent Change	9.55	25.88	-39.78	39.31	-31.54	-23.78

* HEPI (Higher Education Price Index) figures provided by D. Kent Halstead.

The table shows that the rebound from the low 1974 bond and equity market leaves educational institutions far from whole, that is $100 of endowment at June 30, 1973, would have the purchasing power at June 30, 1981, of only $68.46 based on the CPI and $76.22 based on the HEPI. Stated another way, the $139.31 of endowment would have to rise approximately 45% and 30%, respectively (to $203.41 based on the CPI or $182.77 based on the HEPI), depending upon which index was considered more representative, to maintain 1973 purchasing power in 1981. (Table 38 compares the two indices for the past ten years.) This devastating loss in purchasing power is being felt throughout the college and university world and helps explain some of the more recent fiscal problems being experienced by many endowed institutions, especially those that rely more heavily on their endowment to meet current operating expenses. It is not surprising that many institutions have recently undertaken major fund drives to restore the purchasing power of their endowments.

Table 38

Year-to-Year Percent Change in the CPI and HEPI

Fiscal Year	CPI	Year-to-Year Percent Change	HEPI	Year-to-Year Percent Change
1971	100.0	5.2%	100.0	6.4%
1972	103.6	3.6	105.6	5.6
1973	107.7	4.0	111.2	5.3
1974	117.3	8.9	119.1	7.1
1975	130.4	11.2	129.2	8.6
1976	139.6	7.1	137.8	6.6
1977	147.7	5.8	146.7	6.5
1978	157.7	6.8	156.5	6.7
1979	174.9	10.9	168.7	7.8
1980	199.9	14.3	185.4	9.9
1981	218.9	9.5	203.6	9.8

Fiscal 1981 Endowment

The 192 institutions reporting in the 1981 survey indicated that their total market value as of June 30, 1981, increased approximately 13.4% in value to $17.6 billion for June 30, 1980-81, fiscal year. This figure included some $628 million in life income fund assets. As shown in Table 39 the increase in asset value or wealth as represented by the median institution was greater for independent institutions than for public institutions. Those institutions classified as over $50 million in size had the greatest increase, followed by the $10-$50 million group, and then the under $10 million group. The "wealth" percentage is not a measure of investment performance as it does not take into account withdrawals from, or additions to, endowment. The median yield from endowment, excluding life income funds, was slightly greater for public institutions, and the larger the endowment group the lower the reported yield. This latter observation is consistent with the lower bond mix of endowment pools as the size of the endowment increased, which was noted in Section I of this report.

Table 39

Endowment Size, Wealth, and Average Yield Percent*

	6/30/81 Total Market Value (In Billions)	6/30/81 Mean Endowment (In Millions)	6/30/81 Median Endowment (In Millions)	1981 Median Increase (In Wealth)	Median Average Yield Percent
Over $50 Million	$15.540	$221.036	$115.380	14.2%	7.0%
$10-$50 Million	2.029	24.747	21.610	12.8	7.5
Under $10 Million	.244	5.744	6.017	9.6	8.2
Independent	14.867	99.783	36.656	13.9	7.3
Public	2.926	68.043	17.346	10.5	7.8
All Institutions	$17.793	$92.674	$29.333	13.4%	7.5%

*Endowment market value and wealth figures include life income funds. Yield percentages exclude life income funds.

Gifts to Endowment

Because each college and university and its alumni are unique, it is often difficult to draw analogies relating to gift giving among institutions. It is hoped that from data gathered over longer periods of time, many useful trends will appear. Table 40 shows that the smaller the institution, the greater endowment gifts are as a percent of market value. This gift pattern is contradictory to the growth in endowment wealth reported in the prior table, indicating that the larger the institution the greater the increase in wealth. This could be explained by the fact that in 1981 better endowment investment performance was achieved by the larger endowed institutions, as shown in Table 4 of Section I. This would also seem consistent with the greater stock exposure of larger endowments (Table 17) and the fact that stocks far outperformed bonds in 1981.

As shown in Table 40, gifts to all institutions as a percent of market value for the seven years 1975 through 1981 continue to be in a rather tight range of about 1%, from 2.6% in 1974-75 to 3.7% in 1979-80. In each year the gifts to public institutions have represented a larger percent of average market value than those to independent institutions.

Table 40

Fiscal 1975 through 1981 Gifts to Endowment
As a Percent of Average Market Value

	Median Endowment						
	1974-75	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81
Over $50 million	2.0%	3.1%	2.3%	2.4%	2.7%	3.5%	2.9%
$10 to $50 million	2.3	2.2	3.1	3.4	2.9	3.8	3.4
Under $10 million	3.1	5.1	6.7	4.5	6.3	6.1	5.9
Independent	2.3	2.4	3.0	2.7	2.7	3.6	3.3
Public	3.6	4.7	3.7	4.1	4.6	5.4	5.7
All Institutions	2.6%	2.7%	3.1%	3.4%	3.3%	3.7%	3.4%

Quasi-Endowment

Table 41 shows 1980-81 quasi-endowment gifts as a percentage of total endowment gifts. Quasi-endowment gifts are deemed more valuable than restricted gifts as these are gifts over which the institution has the greater discretion. The table shows that independent institutions have about the same quasi-endowment as a percentage of total endowment as public institutions, and that the largest institutions have more quasi-endowment than either the middle-sized institutions, or the smallest sized grouping. In 1981 the median institution received 18.5% in quasi-endowment gifts.

Table 41

Quasi-Endowment

	Total Quasi-Endowment As a Percentage of Total Endowment At June 30, 1981		1980-81 Quasi-Endowment Gifts as a Percentage of Total 1980-81 Gifts	
	Mean Endowment	Median Endowment	Mean Endowment	Median Endowment
Over $50 million	34.6%	32.0%	30.1%	22.1%
$10 to $50 million	27.7	26.0	26.6	18.5
Under $10 million	29.6	29.0	21.1	5.4
Independent	31.6	28.0	24.8	17.4
Public	26.4	27.0	31.7	22.0
All Institutions	30.4%	27.9%	26.4%	18.5%

ENDOWMENT SPENDING AND SUPPORT

Current Fund Revenue and Endowment Income

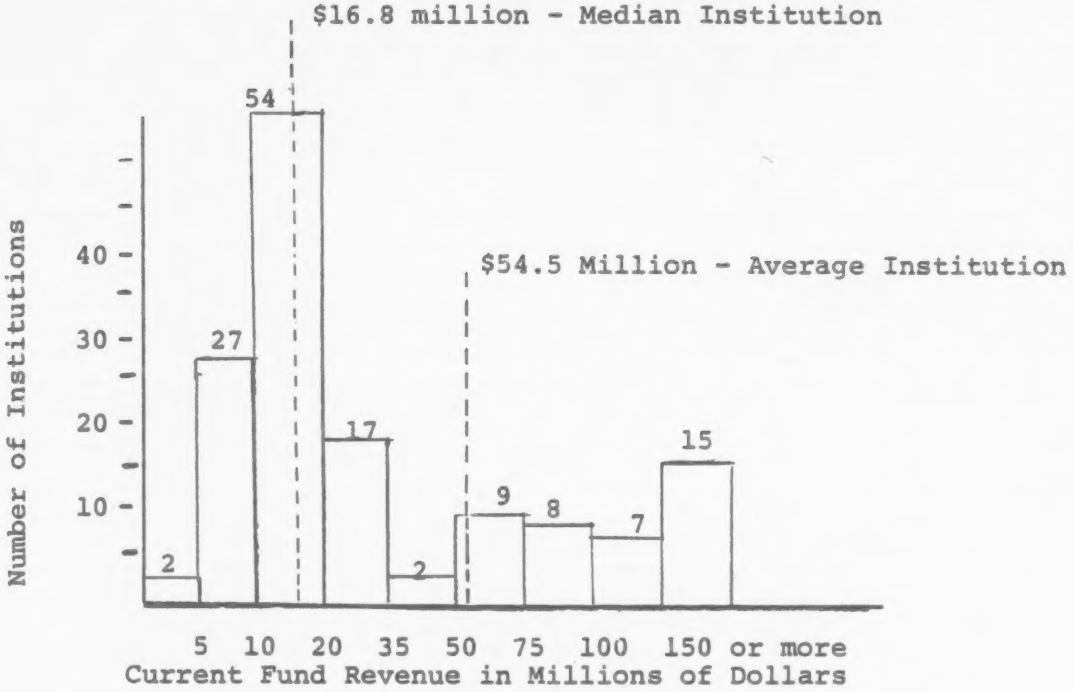
Current fund revenue and endowment income for both independent and public institutions is portrayed in Graphs III and IV. It can be seen from Graph III that two independent and one publicly controlled institution had current fund revenue of less than $5 million. Twenty-seven independent institutions and no public institutions had current fund revenue of $5 to $10 million etc. Graph IV shows, for example, that 7 independent institutions, or 5% (7/140), and 20 public institutions, or 59% (20/34) received income from endowment constituting less than 1% of current fund revenue, etc. The average amount of current fund revenue for independent and public institutions is $54.5 million and $224 million, respectively. The median figures are $16.8 million and $242 million. The average percent of endowment income to current fund revenue for independent and public institutions is 12.5% and 1.7%. The median figures are 8.0% and .7%. This graph depicts the greater importance placed on the endowment of independent institutions in maintaining quality education relative to that of public institutions.

Endowment Coverage

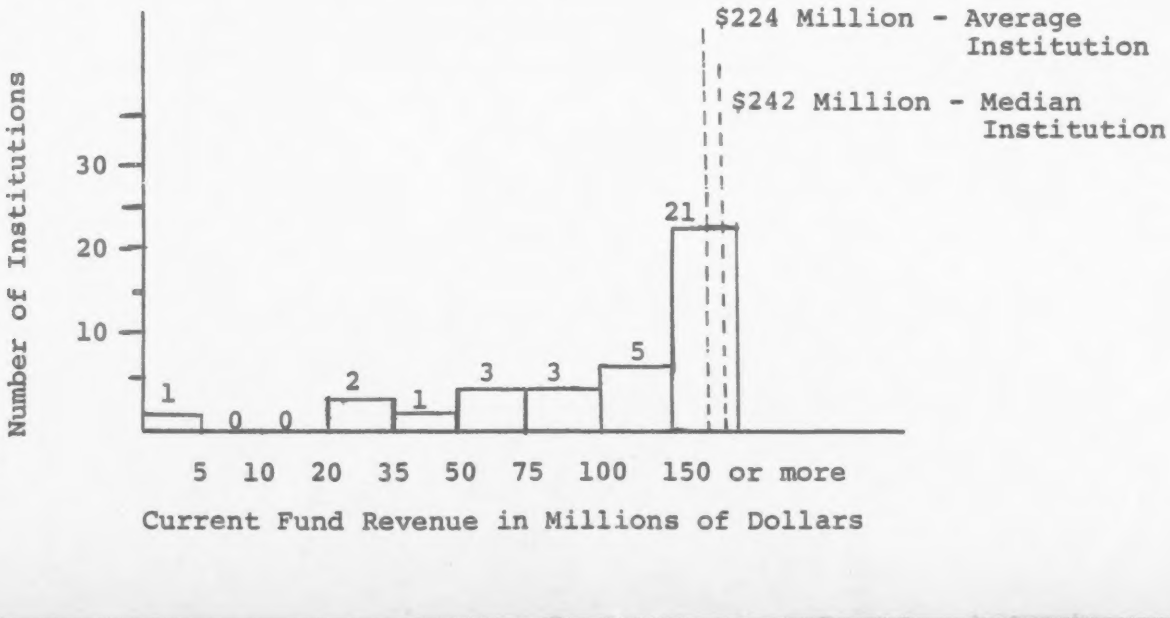
Graph V shows the distribution of 141 independent institutions in terms of their average endowment as of June 30, 1980, and June 30, 1981, divided by fiscal 1981 current fund expenditures. For example, for three institutions the average market value of the endowment was greater than 7.5 times current fund expenditures. On the other hand, 24 institutions could not cover 50% of their current fund expenditures with their entire endowment. The endowment of the average institution is 2.13 times greater than current fund expenditures. The endowment of the median institution is 1.19 times greater.

GRAPH III

Current Fund Revenue for 141 Independent Institutions (1980-81)

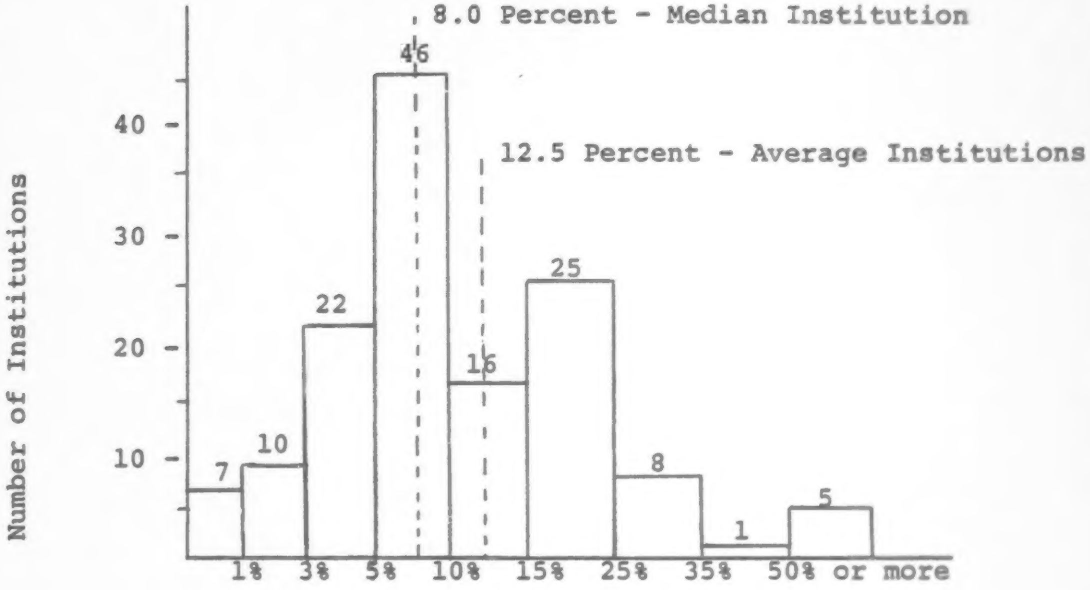


Current Fund Revenue for 36 Publicly Controlled Institutions (1980-81)

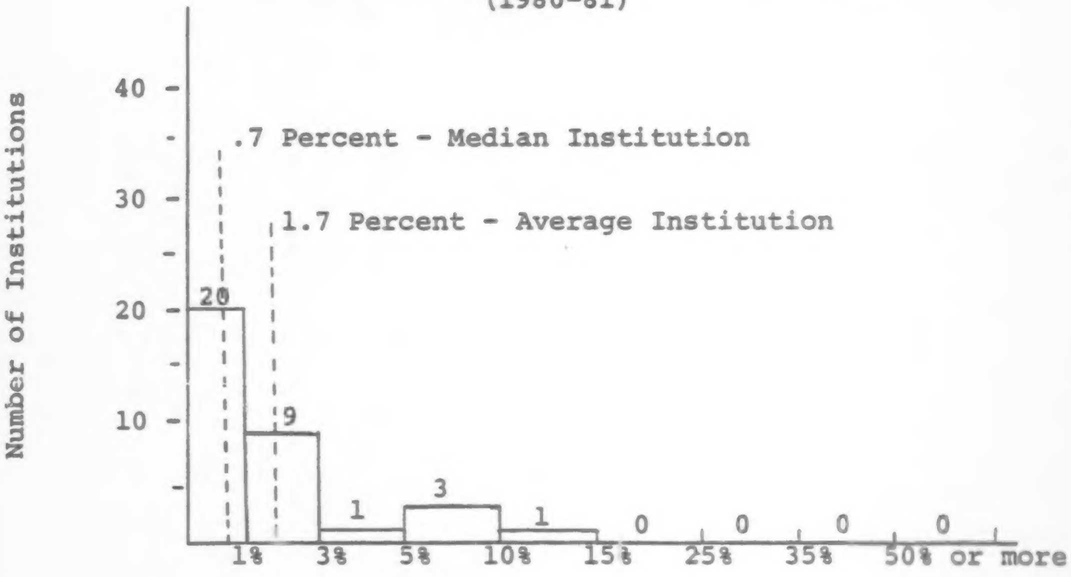


GRAPH IV

Endowment Income as a Percent of Current Fund Revenue
for 140 Independent Institutions
(1980-81)

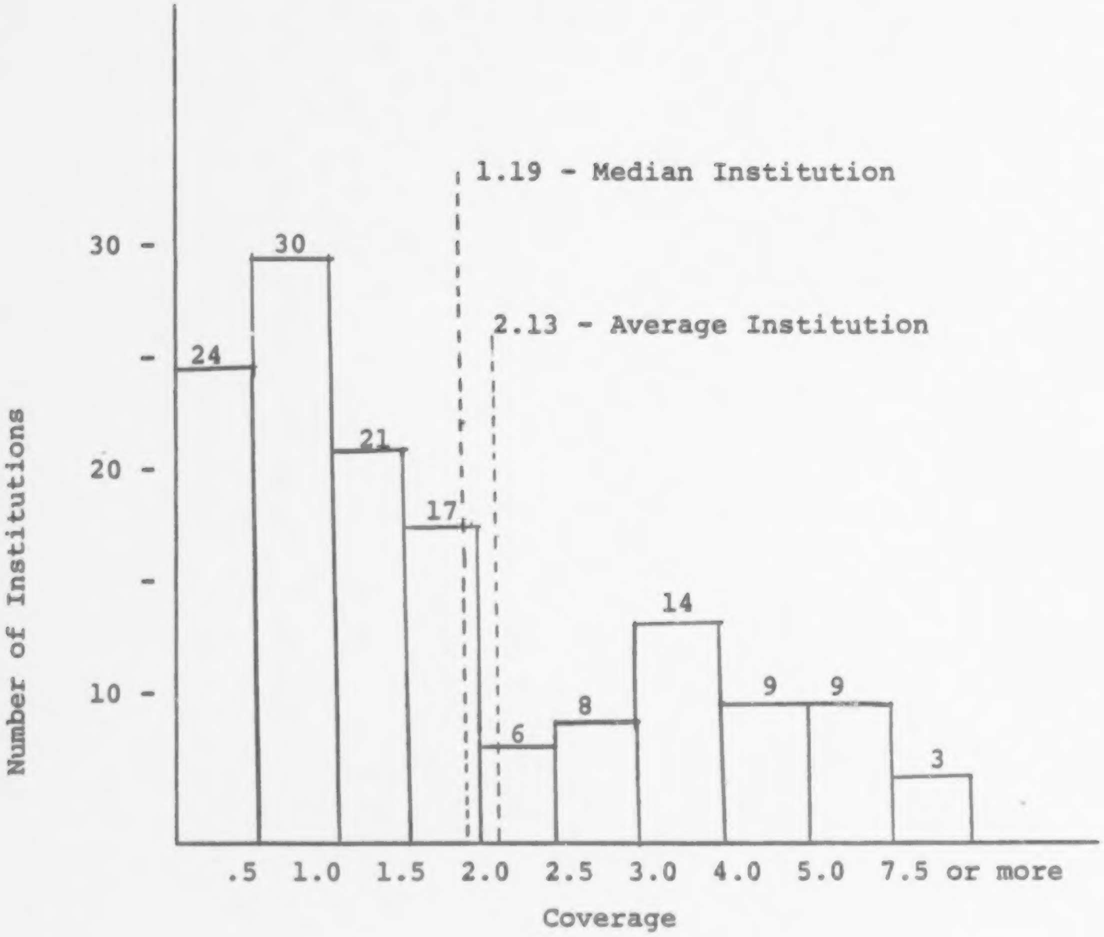


Endowment Income as a Percent of Current Fund Revenue
for 34 Publicly Controlled Institutions
(1980-81)



GRAPH V

Endowment* Coverage of Current Fund Expenditures for 141 Independent Institutions (1980-81)



*Excluding life income funds.

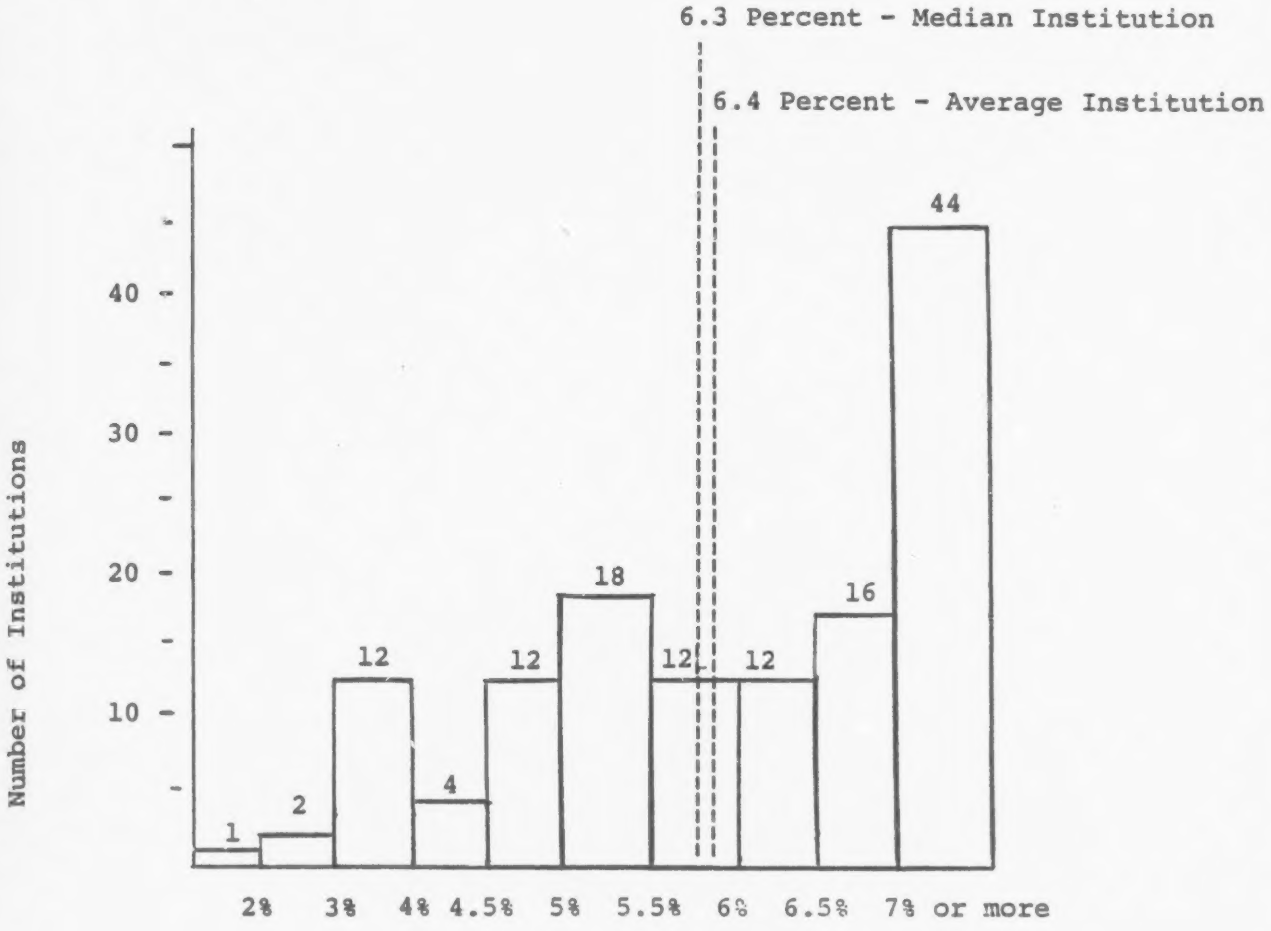
Budget Guideline

Graph VI illustrates for independent institutions the amount of endowment spent for fiscal 1981 current operations as a percentage of the average market value. This percentage is the amount utilized from the endowment after any income is added back to principal and includes any appropriation of endowment principal during the fiscal year to help meet the current budget. In a sense it is a budget "guideline" showing what institutions during fiscal 1980-81 contributed from their total endowment to support their immediate needs. The budget guideline for the average and median institution is 6.4% and 6.3%, respectively.

The 1981 median budget guideline declined .1% from the 1980 guideline, which increased .4%, the same increase which occurred the prior year. In 1978 there was an increase over 1977 of .3%, the latter being an increase over 1976 of .3%. After adjusting for restricted income that must be added to principal (under 2% of gross yield for the median institution) it seems that institutions are, in fact, spending less from endowment to meet expenses in these inflationary times than traditionally could be spent (all yield earned by endowment). The 6.3% median budget guideline is a full percentage point below the 7.3% average yield for independent institutions. One explanation for this may be that a number of institutions are adding income to principal to compensate for the loss of real endowment as a result of inflation and security market performance as evidenced in Table 37. Budget guideline figures are net of life income funds.

GRAPH VI

Budget Guideline--Endowment Income Spent as a Percent Of Average Market Value of the Endowment* Of 133 Independent Institutions (1980-81)

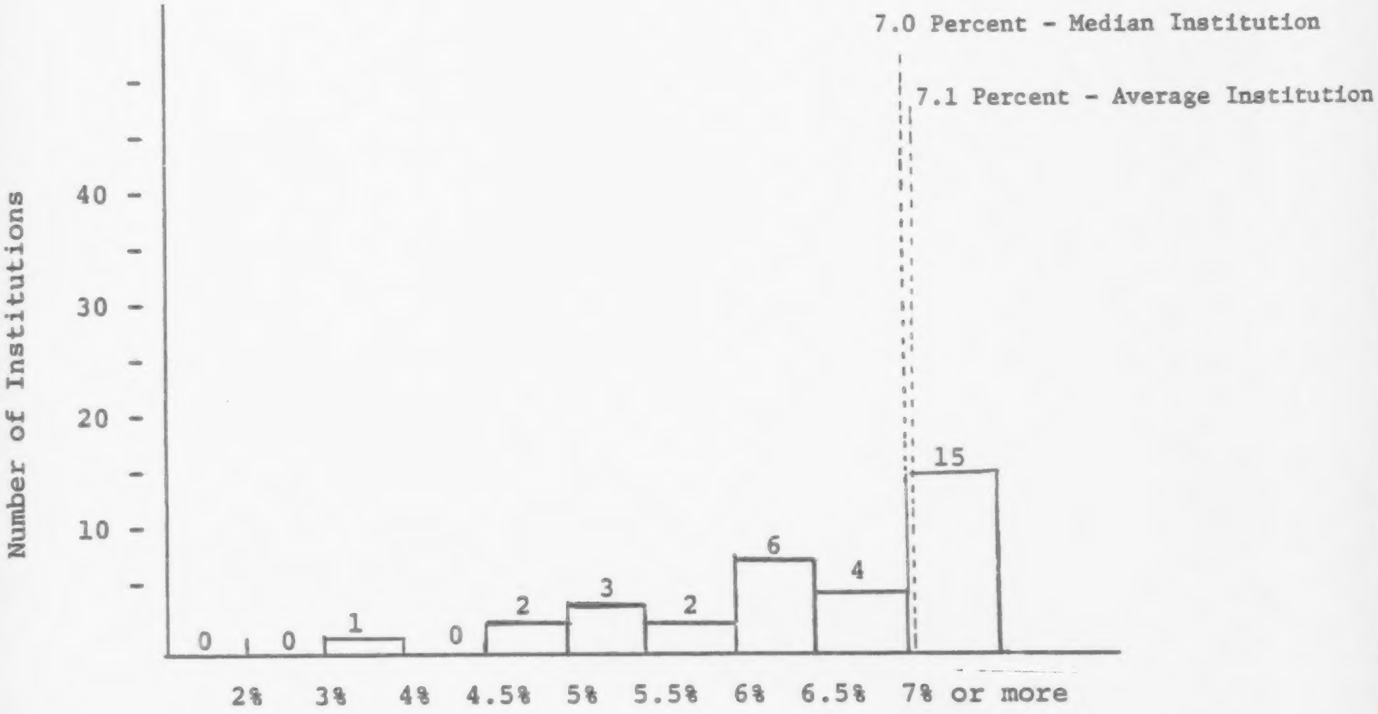


*Excluding life income funds.

Graph VII illustrates budget guideline figures for public institutions. The average guideline figure is 7.1% and the median figure is about 7.0%. The latter figure, as was similarly the case for independent institutions, is almost a full percentage point below the 7.8% average yield for public institutions.

GRAPH VII

Budget Guideline--Endowment Income Spent As A Percent Of Average Market Value Of The Endowment* Of 33 Public Institutions



*Excluding life income funds.

Spending Practices of Institutions

In 1981, seventy-one institutions (39% of the 181 responding) indicated that they use a formula to determine spending from endowment. Of the 71 institutions, only nine reported spending a portion of appreciation (under the total return concept) as well as yield (interest, dividends, rent, etc.) to meet current expenditures. This would seem to indicate that the formulas being utilized "cap" the spending of yield and dictate adding income back to principal for reasons exclusive of donor and other similar restrictions. In fact, of the 165 institutions reporting their total fiscal 1980-81 distribution, 99 (60%) reported adding a portion of their gross yield to a reserve as a hedge against inflation or as part of their spending formula.

Restricted Yield

This is the first year NACUBO is reporting on restricted yield. Sixty-one percent (101 of 165) institutions add income to principal due to donor or other restrictions. Table 42 shows the range of responses, based on restricted yield as a percent of gross yield, categorized by size and by independent and public institutions.

Table 42

1980-81 Range of Institutional Responses of Restricted Yield as a Percentage of Gross Yield

Percent of Gross Yield	Over $50 Million	$10-$50 Million	Under $10 Million	Independent Institution	Public Institution	All Institutions
Under 2%	21	24	8	45	8	53
2 - 4%	5	7	1	10	3	13
4 - 6%	4	5	3	7	5	12
6 - 8%	4	0	0	4	0	4
8 - 10%	2	0	0	1	1	2
10 - 12.5%	1	3	1	3	2	5
12.5 - 15%	1	0	0	1	0	1
15 - 17.5%	0	0	0	0	0	0
17.5 - 20%	3	2	0	4	1	5
Over 20%	1	2	3	3	3	6
TOTAL	42	43	16	78	23	101

Utilization of Quasi-Endowment

This too is the first year NACUBO is reporting information regarding institutions which utilized quasi-endowment principal to help meet the budget. Table 43 shows the range of responses, based on quasi-endowment used for current operations as a percentage of distributed income, for the 19 institutions which reported utilizing quasi-endowment to meet expenditures in 1981.

Table 43

1980-81 Range of Responses of Institutions Reporting Utilization of Quasi-Endowment to Meet the Budget Percentage of Distributed Income

Percent of Gross Yield	Over $50 Million	$10-$50 Million	Under $10 Million	Independent Institution	Public Institution	All Institutions
Under 2%	3	1	0	3	1	4
2 - 4%	2	0	1	3	0	3
4 - 6%	0	0	1	0	1	1
6 - 8%	0	0	0	0	0	0
8 - 10%	1	2	0	2	1	3
10 - 12.5%	1	0	0	1	0	1
12.5 - 15%	1	0	0	1	0	1
15 - 17.5%	0	0	0	0	0	0
17.5 - 20%	0	2	0	2	0	2
Over 20%	3	0	1	4	0	4
TOTAL	11	5	3	16	3	19

Profile of Distributable Endowment Income

Distributable endowment income is the distribution from endowment used to meet current expenditures. It is the gross yield from endowment plus any total return appreciation utilized or quasi-endowment expended to meet the budget, less any yield added to principal for reserve purposes or as part of a spending formula, or due to donor restrictions. Thus, even institutions with a "yield only" spending policy might not be able to spend all gross yield due to donor restrictions or establish a spending formula reserve. On the other hand, distributable income can exceed gross yield if an institution applies the total return concept or has current expenses greater than current revenue and needs to utilize endowment to meet current budget needs.

Distributable income in 1981 was 89.7% of gross yield, that is, the average institution added back to principal 10.3% of interest, dividends, rent, and other similar yield. The range of results is shown in Table 44. This table shows that 4 institutions distributed less than 50% of their gross yield and 12 institutions spent more income in 1981 than yield actually received. Of the 12, 6 of these institutions applied the total return concept and 6 were spending quasi-endowment to meet their budget expenditures.

Table 44

1980-81 Range of Institutional Responses of Distributable Endowment Income as a Percentage of Gross Yield from Endowment

Percent of Gross Yield	Over $50 Million	$10-$50 Million	Under $10 Million	Independent Institution	Public Institution	All Institutions
Under 50%	2	2	0	4	0	4
50 - 60%	2	3	3	8	0	8
60 - 70%	6	5	4	13	2	15
70 - 75%	3	3	5	8	3	11
75 - 80%	8	4	0	11	1	12
80 - 85%	9	5	2	13	3	16
85 - 90%	7	8	4	15	4	19
90 - 95%	10	4	2	11	5	16
95 - 100%	9	29	14	40	12	52
Over 100%	3	7	2	10	2	12
TOTAL	59	70	36	32	32	165

Application of Endowment Spending Formulas

Exhibit IV describes the approach used by each of the seventy-one institutions indicating that they used a formula to determine 1981 spending from endowment. Of the 71 institutions, 7 (10%) adopted their formula in 1981, switching from a policy of spending all yield in 1980. Twenty-seven institutions are considering a formula, while 26 considered and rejected adopting a formula. Fifty-seven have yet to address this matter. Table 45 shows a distribution of those applying a formula, based on size and type of control.

Table 45

Institutions in Fiscal 1980-81 Which Applied An Endowment Spending Formula

	Independent	Public	Total	Percent Of Total
Over $100 Million	20	1	21	29%
$50 - $100 Million	12	1	13	18
$25 - $50 Million	9	3	12	17
$10 - $25 Million	12	2	14	20
$5 - $10 Million	9	0	9	13
Under $5 Million	0	2	2	3
TOTAL	62	9	71	100%

Generally, most of the 71 institutions applied one of two different type formulas: a formula which increased spending by a designated percentage over the prior year, or a formula based on a percentage of endowment market value. Of the 70 reporting their formula, 14 (20%) increased spending a designated percentage, 50 (71%) spent a percentage of endowment, and 6 (9%) used various other approaches.

Most of the 14 institutions increased spending from endowment five to six percent. None of the institutions reported increasing 1981 endowment spending at either the CPI rate of 9.5% or the HEPI increase of 9.8%. One explanation for this action may be an attempt to restore endowment principal by adding back yield. This appears consistent with the budget guideline results reported.

Most of the market formulas apply a percentage to an endowment base averaged over a period of years. The most frequent period used was three years (about one-third of those responding), and the second most frequent, five years (about one-sixth). The remaining institutions generally used a market period closer to the subsequent budget year in question.

Endowment Support

Endowment principal and distributable endowment income per full-time equivalent (FTE) student and per faculty member for independent institutions are shown in Tables 46 through 50. No comparable tables have been produced for public institutions because of the general lack of significance placed on their endowments. Endowment support for approximately 60% of the public institutions responding was in the lowest category range for independent institutions, and over 75% of public institutions responding were in the lowest two categories.

However, a ranking based on endowment per full-time equivalent student for each independent institution and each publicly supported institution is shown in Table 51 and 52 respectively. These tables also indicate endowment per FTE faculty member and the ratio of FTE students to FTE faculty members.

Table 46

Independent Institutions - Endowment Principal Per FTE Student (1980-81)

Amount	Number of Institutions
Less than $1,000	3
$1,000 to $5,000	29
$5,000 to $10,000	25
$10,000 to $15,000	15
$15,000 to $20,000	15
$20,000 to $25,000	8
$25,000 to $35,000	12
$35,000 to $50,000	16
$50,000 to $75,000	12
Greater than $75,000	8
TOTAL	143
Average Institution*	$23,550
Median Institution	$14,600

Table 47

Independent Institutions - Distributable Endowment Income Per FTE Student (1980-81)

Amount	Number of Institutions
Less than $100	9
100 to $200	13
200 to $300	11
300 to $500	18
500 to $750	18
750 to $1,000	9
1,000 to $1,500	13
1,500 to $2,000	10
2,000 to $4,000	22
Greater than $4,000	6
TOTAL	129
Average Institution*	$1,200
Median Institution	$715

*NOTE: Average figures exclude results for Rockefeller University; see Table 51.

Table 48

Independent Institutions - Endowment Principal Per Faculty Member (1980-81)

Amount	Number of Institutions
Less than $25,000	8
25,000 to $50,000	18
50,000 to $75,000	10
75,000 to $100,000	9
100,000 to $125,000	13
125,000 to $150,000	10
150,000 to $200,000	15
200,000 to $300,000	17
300,000 to $400,000	12
Greater than $400,000	31
TOTAL	143
Average Institution	$251,650
Median Institution	$169,000

Table 49

Independent Institutions - Distributable Endowment Income Per Faculty Member (1980-81)

Amount	Number of Institutions
Less than $1,000	5
1,000 to $2,000	7
2,000 to $3,000	12
3,000 to $4,000	5
4,000 to $5,000	9
5,000 to $7,500	20
7,500 to $10,000	13
10,000 to $15,000	17
15,000 to $20,000	11
Greater than $20,000	30
TOTAL	129
Average Institution	$13,625
Median Institution	$8,775

Table 50

Eight-Year Endowment Record - Principal and Income Per FTE Student and Faculty Member

	Principal per FTE Student		Distributable Endowment Income per FTE Student	
	Average Response	Median Response	Average Response	Median Response
1981	$23,550	$14,600	$1,200	$775
1980	21,525	13,450	1,175	795
1979	20,250	11,700	1,125	680
1978	18,250	11,600	1,250	665
1977	17,725	10,000	950	585
1976	18,650	11,750	915	540
1975	15,550	9,400	800	510
1974	14,800	8,200	800	430

	Principal per Faculty Member		Distributable Endowment Income per Faculty Member	
1981	$251,650	$169,000	$13,625	$ 8,775
1980	232,475	165,300	13,075	10,100
1979	224,350	156,800	12,825	9,050
1978	200,100	136,500	11,575	7,750
1977	189,000	135,000	10,200	6,800
1976	192,000	138,000	11,000	7,050
1975	162,000	118,000	8,700	6,250
1974	148,000	100,000	8,100	5,100

INVESTMENT MANAGEMENT AND CUSTODY MATTERS

Investment Management

Thirty-eight institutions of the 188 reporting indicated that they manage at least 80% of their endowments internally. Exhibit V lists these along with the institutions which use outside management and their respective advisors. The exhibit indicates whether the outside manager is retained for stock (S) or bond (B) management or both (S,B). Ninety-eight institutions indicated that they have more than 1 advisor. Ninety-three of these institutions indicated they had more than 1 stock manager and 70 had more than 1 bond manager. The foregoing does not include the institutions which use The Common Fund for Non-Profit Organizations as an investment advisor for stocks, bonds, or cash. The 31 internally managed institutions are fairly well distributed among the various size investment pool categories shown in Table 53, with the greatest concentration among the largest pools.

Table 51

1981 ENDOWMENT SUPPORT
RANKING BASED ON ENDOWMENT PER FULL-TIME EQUIVALENT STUDENT
FOR INDEPENDENT INSTITUTIONS ONLY

RANK	INSTITUTION	1981 ENDOWMENT IN $1,000's	# OF FTE STUDENTS	# OF FTE FACULTY	RATIO OF STUDENTS TO FACULTY	ENDOWMENT PER FACULTY IN $1,000's	ENDOWMENT PER STUDENT IN $1,000's
1	Rockefeller University	270568	95	459	0.2	589	2,848.1
2	Princeton University	920922	5826	663	8.8	1389	158.1
3	Academy of the New Church	55797	397	46	8.6	1213	140.5
4	California Institute of Technology	202090	1720	260	6.6	777	117.5
5	Rice University	376865	3328	297	11.2	1269	113.2
6	Swarthmore College	117066	1317	133	9.9	880	88.9
7	Yale University	792600	9895	1385	7.1	572	80.1
8	Wabash College	59589	781	72	10.8	828	76.3
9	Grinnell College	85552	1203	105	11.5	815	71.1
10	Agnes Scott College	35487	520	67	7.8	530	68.2
11	Berea College	97534	1470	112	13.1	871	66.4
12	Wellesley College	133192	2152	280	7.7	476	61.9
13	Williams College	117044	1905	152	12.5	770	61.4
14	Amherst College	95009	1550	145	10.7	655	61.3
15	Dartmouth College	234055	4259	400	10.6	585	55.0
16	Massachusetts Institute of Technology	500237	9365	1255	7.5	399	53.4
17	Pomona College	72530	1371	133	10.3	545	52.9
18	Wesleyan University	134395	2548	247	10.3	544	52.7
19	Cooper Union for the Advancement of Science and Art	44393	845	81	10.4	548	52.5
20	Earlham College	49719	980	76	12.9	654	50.7
21	Stanford University	598990	12214	1216	10.0	493	49.0
22	University of Chicago	397100	8475	737	11.5	539	46.9
23	Vassar College	104834	2284	208	11.0	504	45.9
24	Thomas Jefferson University	58995	1396	349	4.0	169	42.3
25	Bowdoin College	55303	1337	100	13.4	553	41.4
26	Southwestern University	37915	964	67	14.4	566	39.3
27	Claremont Men's College	31516	814	76	10.7	415	38.7
28	Oberlin College	103102	2702	231	11.7	446	38.2
29	Columbia University	590400	15846	1700	9.3	347	37.3
30	Middlebury College	70211	1904	125	15.2	562	36.9
31	Johns Hopkins University	242430	6599	1620	4.1	150	36.7
32	Haverford College	38179	1050	81	13.0	471	36.4
33	Carleton College	61966	1739	154	11.3	402	35.6

1981 ENDOWMENT SUPPORT

RANKING BASED ON ENDOWMENT PER FULL-TIME EQUIVALENT STUDENT

FOR INDEPENDENT INSTITUTIONS ONLY

RANK	INSTITUTION	1981 ENDOWMENT IN $1,000's	# OF FTE STUDENTS	# OF FTE FACULTY	RATIO OF STUDENTS TO FACULTY	ENDOWMENT PER FACULTY IN $1,000's	ENDOWMENT PER STUDENT IN $1,000's
34	Lafayette College	71558	2016	159	12.7	450	35.5
35	Bryn Mawr College	55521	1597	150	10.6	370	34.8
36	Emory University	252859	7453	1129	6.6	224	33.9
37	Sweet Briar College	20946	631	74	8.5	283	33.2
38	Washington University	266579	8043	1299	6.2	205	33.1
39	Mount Holyoke College	61449	1965	184	10.7	334	31.3
40	Hamilton College	49658	1624	158	10.3	314	30.6
41	Occidental College	46555	1596	112	14.3	416	29.2
42	Whitman College	31760	1093	91	12.0	349	29.1
43	Trinity College (Connecticut)	47181	1669	139	12.0	339	28.3
44	Carnegie-Mellon University	132468	5107	419	12.2	316	25.9
45	University of Richmond	88133	3413	319	10.7	276	25.8
46	University of Notre Dame	218243	8682	814	10.7	268	25.1
47	Northwestern University	320552	13040	1438	9.1	223	24.6
48	Lawrence University of Wisconsin	27369	1125	105	10.7	261	24.3
49	Austin College	27152	1163	86	13.5	316	23.3
50	Colorado College	44181	1900	145	13.1	305	23.3
51	Vanderbilt University	174715	8223	1344	6.1	130	21.2
52	Case Western Reserve University	142286	6725	1204	5.6	118	21.2
53	Cornell University	360441	17066	1488	11.5	242	21.1
54	Cornell College	19280	930	72	12.9	268	20.7
55	Davidson College	27656	1409	103	13.7	269	19.6
56	Hendrix College	18926	981	58	16.9	326	19.3
57	Drew University	34062	1799	110	16.4	310	18.9
58	Rensselaer Polytechnic Institute	103943	5744	387	14.8	269	18.1
59	Colby College	29367	1646	125	13.2	235	17.8
60	Duke University	153950	8904	1370	6.5	112	17.3
61	Wake Forest University	77589	4705	627	7.5	124	16.5
62	Wells College	8500	524	58	9.0	147	16.2
63	Berry College	25535	1586	94	16.9	272	16.1
64	Spelman College	21610	1362	102	13.4	212	15.9
65	Reed College	16786	1070	90	11.9	187	15.7
66	Colgate University	39653	2530	219	11.6	181	15.7

1981 ENDOWMENT SUPPORT
RANKING BASED ON ENDOWMENT PER FULL-TIME EQUIVALENT STUDENT
FOR INDEPENDENT INSTITUTIONS ONLY

RANK	INSTITUTION	1981 ENDOWMENT IN $1,000's	# OF FTE STUDENTS	# OF FTE FACULTY	RATIO OF STUDENTS TO FACULTY	ENDOWMENT PER FACULTY IN $1,000's	ENDOWMENT PER STUDENT IN $1,000's
67	Rhode Island School of Design	24556	1605	115	14.0	214	15.3
68	Southern Methodist University	116855	7776	589	13.2	198	15.0
69	Wheaton College (Massachusetts)	17656	1208	101	12.0	175	14.6
70	Alma College	16455	1142	73	15.6	225	14.4
71	Coe College	16886	1175	94	12.5	180	14.4
72	Lehigh University	72980	5222	349	15.0	209	14.0
73	University of Pennsylvania	232667	16869	1575	10.7	148	13.8
74	College of Wooster	24033	1766	127	13.9	189	13.6
75	Bucknell University	41254	3313	214	15.5	193	12.5
76	Doane College	7333	615	46	13.4	159	11.9
77	Hampton Institute	36656	3104	212	14.6	173	11.8
78	Whittier College	10999	983	86	11.4	128	11.2
79	Barnard College	25880	2491	192	13.0	135	10.4
80	Denison University	21923	2131	153	13.9	143	10.3
81	Dickinson College	17625	1714	141	12.2	125	10.3
82	Kalamazoo College	14805	1452	92	15.8	161	10.2
83	Columbia University Teachers College	26465	2628	151	17.4	175	10.1
84	University of Delaware	143996	15723	825	19.1	175	9.2
85	Baylor University	87500	9829	491	20.0	178	8.9
86	Clark University	17289	1946	144	13.5	120	8.9
87	Simmons College	22014	2520	171	14.7	129	8.7
88	Franklin & Marshall College	16218	2003	126	15.9	129	8.1
89	McGill University	153200	19008	994	19.1	154	8.1
90	Connecticut College	14046	1782	137	13.0	103	7.9
91	Loyola University of Chicago	83615	11012	666	16.5	126	7.6
92	Kenyon College	10856	1445	102	14.2	106	7.5
93	Wittenberg University	16457	2278	174	13.1	95	7.2
94	Allegheny College	13659	1895	133	14.2	103	7.2
95	Georgetown University	71844	10500	1015	10.3	71	6.8
96	Norwich University	12849	1900	140	13.6	92	6.8
97	Furman University	15762	2383	146	16.3	108	6.6
98	Alfred University	8089	1268	92	13.8	88	6.4
99	Rochester Institute of Technology	64656	10536	693	15.2	93	6.1

1981 ENDOWMENT SUPPORT

RANKING BASED ON ENDOWMENT PER FULL-TIME EQUIVALENT STUDENT

FOR INDEPENDENT INSTITUTIONS ONLY

RANK	INSTITUTION	1981 ENDOWMENT IN $1,000's	# OF FTE STUDENTS	# OF FTE FACULTY	RATIO OF STUDENTS TO FACULTY	ENDOWMENT PER FACULTY IN $1,000's	ENDOWMENT PER STUDENT IN $1,000's
100	University of Puget Sound	15088	2503	156	16.0	97	6.0
101	Baldwin-Wallace College	14894	2490	132	18.9	113	6.0
102	Hobart & William Smith College	10704	1829	121	15.1	88	5.9
103	Babson College	7441	1298	93	14.0	80	5.7
104	Muhlenberg College	9045	1586	106	15.0	85	5.7
105	Rollins College	7314	1362	101	13.5	72	5.4
106	Saint Norbert College	8659	1629	86	18.9	101	5.3
107	Wentworth Institute of Technology	14577	2746	165	16.6	88	5.3
108	University of Santa Clara	28402	5613	253	22.2	112	5.1
109	Carroll College	6102	1227	89	13.8	69	5.0
110	Saint Mary's College (Notre Dame)	8645	1759	134	13.1	65	4.9
111	Moravian College	6027	1304	88	14.8	68	4.6
112	Trinity College (Washington)	2639	657	110	6.0	24	4.0
113	Loras College	6013	1540	104	14.8	58	3.9
114	University of Denver	27014	7163	486	14.7	56	3.8
115	University of Miami	47707	13522	1221	11.1	39	3.5
116	Syracuse University	58816	16986	912	18.6	64	3.5
117	Skidmore College	7288	2200	161	13.7	45	3.3
118	Hope College	6490	2226	140	15.9	46	2.9
119	Boston University	60898	21165	2513	8.4	24	2.9
120	Washburn College	11403	4023	235	17.1	49	2.8
121	Ohio Northern University	7684	2712	173	15.7	44	2.8
122	Augustana College	6527	2313	134	17.2	49	2.8
123	Newberry College	2055	737	74	10.0	28	2.8
124	University of Tulsa	13537	5051	279	18.1	49	2.7
125	Mercer University	11357	4417	201	22.0	57	2.6
126	Drake University	11875	5178	298	17.4	40	2.3
127	Marquette University	19827	9792	623	15.7	32	2.0
128	Endow Association of College of William & Mary	12204	6039	412	14.7	30	2.0
129	University of Scranton	6781	3740	180	20.8	38	1.8
130	Clarkson College of Technology	6603	3746	200	18.7	33	1.8
131	University of Tampa	2928	1676	87	19.3	34	1.7
132	George Washington University	21834	12583	943	13.3	23	1.7

1981 ENDOWMENT SUPPORT

RANKING BASED ON ENDOWMENT PER FULL-TIME EQUIVALENT STUDENT

FOR INDEPENDENT INSTITUTIONS ONLY

RANK	INSTITUTION	1981 ENDOWMENT IN $1,000's	# OF FTE STUDENTS	# OF FTE FACULTY	RATIO OF STUDENTS TO FACULTY	ENDOWMENT PER FACULTY IN $1,000's	ENDOWMENT PER STUDENT IN $1,000's
133	Philadelphia College of Textiles and Science	3599	2300	162	14.2	22	1.6
134	University of Evansville	5936	3845	234	16.4	25	1.5
135	University of Dayton	11403	9642	352	27.4	32	1.2
136	Chapman College	3157	2768	94	29.4	34	1.1
137	Canisius College	3538	3515	195	18.0	18	1.0
138	College of William & Mary	5529	6039	412	14.7	13	0.9
139	The American University	5818	8767	384	22.8	15	0.7
140	Monmouth College	1472	2528	172	14.7	9	0.6

Table 52

1981 ENDOWMENT SUPPORT

RANKING BASED ON ENDOWMENT PER FULL-TIME EQUIVALENT STUDENT

FOR PUBLIC INSTITUTIONS ONLY

RANK	INSTITUTION	1981 ENDOWMENT IN $1,000's	# OF FTE STUDENTS	# OF FTE FACULTY	RATIO OF STUDENTS TO FACULTY	ENDOWMENT PER FACULTY IN $1,000's	ENDOWMENT PER STUDENT IN $1,000's
1	University of Texas System	1485090	113514	6953	16.3	214	13.1
2	University of Virginia	179697	16201	915	17.7	196	11.1
3	University of Cincinnati	103612	27403	1980	13.8	52	3.8
4	University of Vermont	32006	9341	609	15.3	53	3.4
5	University of Pittsburgh	113216	34963	2125	16.5	53	3.2
6	University of Tennessee (Chattanooga)	15614	5357	267	20.1	58	2.9
7	University of North Carolina	43605	19481	1940	10.0	22	2.2
8	University of Minnesota	113867	59090	4745	12.5	24	1.9
9	Ohio University	27050	17779	976	18.2	28	1.5
10	Rutgers University	42601	38086	2516	15.1	17	1.1
11	Georgia Institute of Technology	10810	11158	605	18.4	18	1.0
12	University of Illinois	52672	56321	3353	16.8	16	0.9
13	University of Missouri	34027	44875	2665	16.8	13	0.8
14	University of Maine	11983	20800	1266	16.4	9	0.6
15	University of Arkansas	9005	15889	667	23.8	14	0.6
16	Temple University	12722	23836	1611	14.8	8	0.5
17	University of Maryland	20714	40797	2827	14.4	7	0.5
18	University of Wisconsin Foundation	20281	41691	5490	7.6	4	0.5
19	Michigan State University	15798	39343	2648	14.9	6	0.4
20	Washington State University	5351	17044	1008	16.9	5	0.3
21	Pennsylvania State University	18320	61093	3084	19.8	6	0.3
22	Oregon State Board of Higher Education	15377	54782	5379	10.2	3	0.3
23	Indiana University	13452	54723	3306	16.6	4	0.2
24	University of Akron	3940	17186	712	24.1	6	0.2
25	University of Oregon Development Foundation	3683	16500	1000	16.5	4	0.2
26	University of Mississippi	1850	9276	540	17.2	3	0.2
27	Western Michigan University	2564	16831	867	19.4	3	0.2
28	Eastern Michigan University	1938	14147	690	20.5	3	0.1
29	University of Connecticut	1833	19380	1262	15.4	1	0.1
30	Arizona State University	2325	29783	1380	21.6	2	0.1

Table 53

Internal Investment Management

Investment Pool Size	Number in Each Group	Percent of Total
Over $100 million	10	36%
$50 to $100 million	4	14
$25 to $50 million	5	18
$10 to $25 million	5	18
5 to $10 million	2	7
Under $5 million	2	7
TOTAL	28	100%

Custodial Arrangements

Nine institutions indicated that they serve as their own custodian for at least 80% of their assets. These institutions are shown in Exhibit IV as are the institutions which use outside custodians and the respective financial institution retained. Of the 182 indicating they use outside custodians, 85 use more than one custodian.

Custodial Fees

About two dozen institutions indicated that their custodian is also their investment advisor and that it was not possible to identify separately the cost for each service. Excluding these institutions and the nine institutions which do not use outside custodians, 138 institutions provided information on custody fees. These fees excluded any custody costs relating to security lending, option writing, or investment management.

It is difficult to find an accurate measure to compare institutional custody fees. This is because many special arrangements have developed between institutions and their custodians. For example, from earlier surveys it is known that institutions with longer custodial relations tend to pay less. Custodial fees will also vary because of the different number of security positions and shares, etc. The foregoing should be taken into consideration when reviewing custodial fees which are compared based on fees paid as a percent of assets under custody.

Table 54 shows that the average institution pays .068% of the market value of assets under custody. Six institutions pay less than .01%, 13 others pay .01 and .02%, etc. There appears to be a realization of economies of scale as institutions over $50 million pay .039%, institutions between $10 to $50 million pay .076%, and institutions under $10 million pay .26%.

Table 54

Custodial Fees as a Percent of Assets under Custody

	Under $10 Million	$10 to $50 Million	Over $50 Million	All Institutions
Under .01%	3	3	0	6
.01 to .02%	5	6	2	13
.02 to .03%	9	4	0	13
.03 to .04%	9	4	0	13
.04 to .05%	3	2	0	5
.05 to .06%	5	7	1	13
.06 to .07%	4	4	1	9
.07 to .08%	2	3	1	6
.08 to .09%	0	3	1	4
.09 to .10%	0	5	3	8
.10 to .12.5%	4	9	1	14
.12.5 to .15%	2	2	1	5
.15 to .17.5%	1	2	2	5
.17.5 to .20%	2	2	0	4
Over .20%	1	4	15	20
TOTAL	50	60	28	138
Median Responses	.039%	.076%	.26%	.068%

INVESTMENT PRACTICE AND POLICY

Investment Policy Statement

One hundred and thirty-three institutions, almost 75% of the 181 reporting, indicated they have a written statement of investment objectives.

Option Writing

Thirty institutions reported they participate in the call option market, two of which participate in the put option market as well. Seventeen (4 more than last year) reported they began writing call options and stopped, and about two dozen presently have this matter under consideration. Of those which started and stopped, 3 began in 1974 and stopped in 1977, 3 began in 1975 and stopped in 1976, 4 began in 1976 - 1 each stopping in 1976, 1977, 1979, and 1981. Two others started in 1977 - 1 stopping in 1978 and 1 stopping in 1980, 2 started and stopped in 1978, and 2 started in 1979 and stopped in 1980. One started in 1980 and stopped in 1981. Of the remaining institutions, about half considered writing options and rejected the idea and about half did not consider writing options. The market size distribution of those utilizing options is shown in Table 55.

Some institutions use options in a very specific way, such as only writing on special holdings, or as part of a sale strategy. About half the remaining institutions have pilot option writing programs on a fully "covered" basis, and half write options on their mainstream endowment holdings. Certain programs are considered incremental or "override" programs forbidding stocks from being called away. These consequently are structured to have no effect on the underlying equity investment. The 30 institutions place various parameters on their approach to the options market, some which are as follows:

- Write covered options on stocks already in their portfolio.
- Write covered options on up to a specific percent of their portfolio (i.e., 5, 10, or 20%).
- Write covered options on up to a specific percent of their total portfolio (i.e., 2.5, 3, 5, 10, or 20%).
- Write covered options on up to a specific dollar amount (i.e., $1.25, $2.50, $3, or $6 million).
- Write options only on securities we would consider selling anyway.
- Write options on up to half of internally managed holdings, on a maximum of 20 different securities.
- Write options on a percentage of an existing position (i.e., 25%, 50%).
- Segregate cash to buy stocks and write options on issues on manager's approved list. No holding can be greater than $150,000.
- Options must be repurchased, securities cannot be called.

Over half of the institutions participating in the option market have been doing so for at least three years as shown in Table 55.

Table 55

Size of Institutions
Participating in Stock Option Writing at June 30, 1981

Endowment Size	Number Participating	Percent Participating
Over $100 Million	9	30%
$50 to $100 Million	10	34
$25 to $50 Million	4	13
$10 to $25 Million	3	10
$5 to $10 Million	4	13
Under $5 Million	0	0
TOTAL	30	100%

Venture Capital

Of the 182 institutions responding, 33 or 18% have made investments in venture capital. All but one of these institutions are independently supported. Generally speaking, as shown in Table 56, the larger institutions have been more active in this area and total venture capital investments represent less than 5% of total June 30, 1981 endowment assets.

Table 56

Range of Responses for all Institutions of
Venture Capital Investments
as a Percentage of June 30, 1981 Endowment Assets

Percentage of Endowment	Over $100 Million	$50-$100 Million	$25-$50 Million	$10-$25 Million	$5-$10 Million	Under $5 Million	Total
Under 1%	7	1	1	1	0	0	10
1 - 2.5%	10	1	0	0	1	0	11
2.5 - 5%	5	2	1	0	0	0	8
5 - 7.5%	0	1	0	0	1	0	2
7.5% - 10%	0	0	0	0	0	0	0
Over 10%	0	0	0	0	0	0	0
TOTAL	22	5	5	1	2	0	32

Futures Market

Only three institutions indicated that they use "financial futures" as a tool in managing the fixed-income portion of their portfolio. One institution also indicated it invested in gold and silver futures.

Investment in Gold

Only two institutions of the 177 responding indicated they invest in gold stocks. Five others invest in companies with significant exposure to gold that might be considered a gold play. No institution invested in gold coins, although two stated they have chosen to retain, as an investment, gold and other coins received as part of a collection from donors. One institution invests in gold futures.

Commodities Market

Only one institution indicated it invested in commodities.

Foreign Investments

Of the 179 institutions responding, 98 or 55%, indicated they permit investment in foreign securities. Another 16, or 9%, allow such investments by exception. Sixty-one, or 34%, do not permit such investments and four others are considering foreign security investments.

South African Investments

One hundred and nine of the 184 institutions responding, or 59%, indicated they do not have a specific policy relating to U.S. companies that are doing business in the Republic of South Africa or a policy affecting the direct investment in South African companies. Seventy-five, or 41%, responded that they do have such a policy, but their statements are too lengthy to report in this survey.

EXHIBIT I

1981 NACUBO COMPARATIVE PERFORMANCE STUDY

186 PARTICIPATING INSTITUTIONS (REPRESENTING 209 POOLS)

Academy of the New Church
Agnes Scott College
Alfred University
Allegheny College
Alma College
American University
Amherst College
Arizona State University
Austin College
Babson College
Baldwin-Wallace College
Barnard College
Baylor College of Medicine
Berea College
Berry College
Boston University
Bowdoin College
Brandeis University
Brown University
Bryn Mawr College
Bucknell University
California Institute of Technology
Canisius College
Carleton College
Carnegie-Mellon University
Carroll College
Case Western Reserve University
Claremont Men's College
Clark University
Clarkson College of Technology
Coe College
Colby College
Colgate University
College of William & Mary
College of Wooster
Colorado College
Columbia University, Teachers College
Connecticut College
Cooper Union
Cornell College
Cornell University
Dartmouth College
Davidson College
Denison University
Dickinson College
Doane College
Drake University
Drew University
Duke University
Earlham College
Eastern Michigan State University
Emory University
Endowment Assoc. of William & Mary
Franklin and Marshall College
Furman University
George Washington University
Georgetown University
Grinnell College
Hamilton College
Hampton Institute
Harvard University
Haverford College
Hendrix College
Hobart and William Smith Colleges
Hollins College
Hope College
Indiana University
Johns Hopkins University
Kalamazoo College
Kenyon College
Lafayette College
Lawrence University
Lehigh University
Loyola University of Chicago
McGill University
Marquette University
Massachusetts Institute of Technology
Medical College of Pennsylvania
Mercer University
Michigan State University
Middlebury College
Monmouth College
Moravian College
Mount Holyoke College
Muhlenberg College
Newberry College
New York University
North Carolina State University
Northwestern University
Norwich University
Oberlin College
Occidental College
Ohio Northern University
Ohio State University
Ohio University
Ohio Wesleyan University
Oregon State Board of Higher Education
Pennsylvania State University

Philadelphia College of Textiles
Pomona College
Pratt Institute
Princeton University
Radcliffe College
Reed College
Rensselaer Polytechnic Institute
Rhode Island School of Design
Rice University
Rochester Institute of Technology
Rockefeller University
Rollins College
Rutgers, The State University of New Jersey
St. Mary's College
St. Norbert College
Simmons College
Skidmore College
Smith College
Southern Methodist University
Southwestern University
Spelman College
Stanford University
State University of New York
Swarthmore College
Sweet Briar College
Syracuse University
Temple Unversity
Thomas Jefferson University
Trinity College (Conn.)
Tufts University
University of Akron
University of Alabama System
University of Arizona
University of Arkansas
University of Chicago
University of Cincinnati
University of Connecticut
University of Dayton
University of Delaware
University of Denver
University of Evansville
University of Illinois
University of Iowa
University of Maine
University of Maryland
University of Miami
University of Michigan
University of Minnesota
University of Mississippi
University of Missouri
University of Nebraska
University of North Carolina
University of Notre Dame
University of Oregon Foundation
University of Pennsylvania
University of Pittsburgh
University of Puget Sound
University of Richmond
University of Santa Clara
University of Scranton
University of Southern California
University of Tampa
University of Tennessee
University of Texas
University of Tulsa
University of Utah
University of Vermont
University of Virginia
University of Wisconsin Foundation
University of Wisconsin System
Vanderbilt University
Vassar College
Wabash College
Wake Forest University
Washburn College
Washington State University
Washington University
Wellesley College
Wells College
Wentworth Institute of Technology
Wesleyan University
Western Michigan University Foundation
Wheaton College
Whitman College
Williams College
Wittenberg University
Worcester Polytechnic Institute
Yale University

EXHIBIT II

1981 COMPARATIVE PERFORMANCE STUDY

CHARACTERISTICS OF PARTICIPATING INVESTMENT POOLS

Pool Characteristics:

1) This is a pooled fund consisting principally of endowment and similar funds.
2) This is a separately invested fund which was unitized to enable performance to be accurately measured.
3) This is a combination of more than one fund.
4) This is a pool consisting of only those assets over which management has discretion.
5) This is a pooled life income fund.

Pool Composition:

1) All invested funds, endowment, quasi-endowment, and funds invested for plant or other purposes but temporarily invested in the pool.
2) Endowment and quasi-endowment.
3) Endowment only.
4) Quasi-endowment only.

Investment Objectives:

1) Total Return - Investment returns are sought from both market appreciation and dividends and interest; current income requirements generally do not dictate the kind of securities that may be held, as primary emphasis is on long-term overall return.
2) Balanced - The pooled funds are invested in such a manner as to minimize investment risks without unduly sacrificing current income or the possibility for some long-term growth. This is usually done by investing a portion of the pool in fixed income securities.
3) Income Orientated - Investment policy is dictated by current income needs; market appreciation is never utilized for current operating purposes, and primary emphasis is on current income maximization.

Market Value:

A. Over $100 Million.
B. $50 to $100 Million.
C. $25 to $50 Million.
D. $10 to $25 Million.
E. $5 to $10 Million.
F. Under $5 Million.

1981 NACUBO COMPARATIVE PERFORMANCE STUDY
CHARACTERISTICS OF PARTICIPATING INVESTMENT POOLS

No.	Code Name	Pool Char	Pool Compos	Invest Object	Mkt Val Size	% Cash 1981	% Bonds 1981	% Stocks 1981	% Real Estate 1981	% Miscel-laneous Assets 1981	% Non-Control-lable Assets 1981	6/30/81 # Bonds	6/30/81 #Stocks	1981 Bond Turn-Over%	1981 Stock Turn-Over %
1	E1	1	2	1	A	15	22	59	2	2	2	45	110	N/A	N/A
2	E2	1	3	2	D	11	21	66	0	2	2	25	40	71.4	20.6
3	E3	1	1	1	D	6	15	79	0	0	0	21	48	7.3	12.9
4	E4	1	2	1	D	14	9	70	7	0	0	14	56	1.4	81
5	E5	1	2	1	A	6	9	82	2.2	1	2	27	148	3.2	22.3
6	E6	1	2	2	B	18	23	54	0	5	5	21	137	0.5	N/A
7	E7	1	2	1	F	3	53	44	0	0	43	23	21	N/A	N/A
8	E8	1	2	1	A	16	13	69	0	3	3	9	125	N/A	N/A
9	E9	1	3	2	E	41	26	33	0	0	0	7	13	51.1	119.5
10	E10	1	2	1	D	19	12	69	0	0	0	12	50	1.4	81
11	E11	3	1	1	A	13	10	66	5.9	6	1	N/A	N/A	N/A	N/A
12	E12	5	2	2	F	14	20	65	0	0	0	7	24	14.8	1.9
13	E13	1	2	3	E	20	35	43	0	2	0	N/A	N/A	45	110
14	E14	1	2	2	D	11	18	63	0	8	8	22	41	12	16
15	E15	1	2	2	B	14	9	52	16.1	9	11	19	64	16	22
16	E16	1	2	1	D	10	24	62	2.2	2	0	17	55	N/A	N/A
17	E17	1	2	2	B	11	20	63	0	6	5	27	43	124	40
18	E18	4	1	1	A	11	15	73	0	2	0	67	46	15.8	13.9
19	E19	1	1	1	B	10	9	80	0	1	4	13	138	0	28.5
20	E20	1	2	1	C	5	46	48	1	0	0	32	71	46	9
21	E21	1	2	2	A	0	24	76	0	0	2	30	65	0	0
22	E22	1	3	3	D	10	46	45	0	0	0	64	43	2.5	21.1
23	E23	1	2	2	F	3	26	63	0	8	1	N/A	N/A	N/A	N/A
24	E24	1	2	1	D	17	10	73	0	0	0	25	69	34	38
25	E25	1	2	1	D	5	6	89	0	1	0	11	98	N/A	N/A
26	E26	1	2	2	C	2	19	78	0	0	11	19	60	1.7	12
27	E27	1	2	2	B	9	27	63	0	2	0	26	116	89.3	83.5
28	E28	1	2	2	A	30	34	32	4	0	0	N/A	N/A	N/A	N/A
29	E29	1	2	1	A	8	31	60	0	2	0	28	57	37.5	40.6
30	E30	2	1	2	A	12	21	66	0.1	1	1	38	55	4.7	37.7
31	E31	1	3	2	A	2	34	53	0.1	12	4	98	167	28.8	15.7
32	E32	1	2	2	C	21	29	50	0	0	0	36	55	53	25
33	E33	3	2	1	A	4	17	79	0	0	0	31	141	113.6	54.3
34	E34	1	2	2	A	3	8	74	14	2	16	16	162	0	31.1

No.	Code Name	Pool Char	Pool Compos	Invest Object	Mkt Val Size	% Cash 1981	% Bonds 1981	% Stocks 1981	% Real Estate 1981	% Miscel-laneous Assets 1981	% Non-Control-lable Assets 1981	6/30/81 # Bonds	6/30/81 # Stocks	1981 Bond Turn-Over %	1981 Stock Turn-Over %
35	E35	1	2	2	C	9	30	60	0	1	0	36	100	N/A	N/A
36	E36	4	1	2	A	32	12	55	1	0	0	12	103	71	N/A
37	E37	1	2	2	B	20	17	59	0	4	3	90	129	5	39.7
38	E38	1	2	2	A	4	19	74	0.2	4	1	36	87	270	28
39	E39	1	2	1	E	10	44	46	0	0	0	23	30	6.5	21.3
40	E40	1	2	1	A	3	16	69	7	5	11	42	372	N/A	N/A
41	E41	2	1	3	D	13	43	44	0	0	0	29	72	104	69
42	E42	1	2	2	E	14	27	60	0	0	0	35	68	15.3	7.8
43	E43	1	2	2	C	4	14	77	0	4	1	22	63	2.3	28.5
44	E44	1	3	2	F	26	18	56	0	0	0	7	31	0	0
45	E45	1	2	1	A	5	29	63	0	3	1	64	30	38	41.8
46	E46	1	2	2	A	6	10	84	0	0	10	56	118	36.1	20.1
47	E47	1	2	1	B	7	29	62	0.8	1	2	25	72	149.5	33
48	E48	1	2	1	E	4	0	61	0	35	9	N/A	36	0	40
49	E49	1	2	1	C	28	15	57	0	0	0	36	114	N/A	N/A
50	E50	1	2	1	C	13	47	39	0	1	0	10	11	0	58.9
51	E51	1	2	1	C	18	8	66	7.5	0	8	4	36	56.9	48.4
52	E52	1	2	1	D	8	6	83	1.1	3	13	12	70	3	53
53	E53	1	2	2	B	9	18	70	0	3	3	30	97	N/A	N/A
54	E54	1	2	1	C	7	15	74	0	4	4	27	81	143	25
55	E55	1	2	1	C	7	24	68	0	0	12	28	88	111	45
56	E56	1	2	2	A	7	24	66	0.9	2	0	44	112	12.1	62.6
57	E57	1	1	2	A	9	28	63	0	0	0	261	164	328.3	24.4
58	E58	1	2	2	C	3	25	72	0	0	1	29	65	72.5	54.1
59	E59	1	2	2	D	24	25	51	0	0	0	10	25	22	41
60	E60	1	2	2	D	12	24	65	0	0	8	29	67	20.7	41.5
61	E61	1	1	1	D	8	31	61	0	0	0	23	36	162	22
62	E62	1	2	2	D	11	22	67	0	0	0	19	36	20.4	47.1
63	E63	1	2	1	A	10	20	71	0	0	0	9	145	N/A	163
64	E64	1	2	1	E	9	30	61	0	0	0	17	67	197	123
65	E65	1	2	1	C	13	30	57	0.5	1	2	54	105	31.4	22.8
66	E66	1	1	1	C	3	35	61	0	0	7	25	42	17.2	46
67	E67	1	2	2	C	7	17	77	0	0	0	23	76	0.2	11.4
68	E68	3	1	1	C	4	32	64	0	0	2	30	90	56	42.8
69	E69	1	2	1	B	11	23	63	0	3	2	28	43	13	14.5
70	E70	1	1	2	D	4	29	65	0	2	0	N/A	81	0	92
71	E71	1	2	1	C	12	26	62	0	0	0	0	0	N/A	N/A
72	E72	1	2	2	A	9	22	62	0.7	6	7	N/A	N/A	N/A	N/A
73	E73	1	2	2	A	14	20	59	0.4	8	6	2	2	14	37
74	E74	1	1	2	D	25	46	29	0	0	4	63	25	20	91

No.	Code Name	Pool Char	Pool Compos	Invest Object	Mkt Val Size	% Cash 1981	% Bonds 1981	% Stocks 1981	% Real Estate 1981	% Miscel-laneous Assets 1981	% Non-Control-lable Assets 1981	6/30/81 # Bonds	6/30/81 # Stocks	1981 Bond Turn-Over %	1981 Stock Turn-Over %
75	E75	1	1	1	B	2	21	77	0	0	0	68	68	1.5	15.6
76	E76	1	3	2	F	2	24	73	0	0	0	12	51	104.9	23.8
77	E77	5	2	2	E	14	30	56	0	0	0	14	45	165.5	17
78	E78	2	2	2	D	18	29	53	0	0	0	27	89	31.7	46.8
79	E79	2	2	2	D	6	16	78	0	0	0	31	54	0	12
80	E80	3	2	2	C	25	43	30	0.9	2	0	52	41	7	22
81	E81	1	2	1	D	2	22	53	8.4	15	4	49	123	N/A	45.2
82	E82	1	2	2	F	21	41	38	0	0	0	18	13	N/A	N/A
83	E83	1	2	2	F	28	31	41	0	0	0	13	17	N/A	N/A
84	E84	1	3	2	F	28	37	35	0	0	0	0	0	366.9	73.7
85	E85	2	2	2	B	14	27	49	8.5	1	8	51	62	34.9	54.4
86	E86	3	2	1	C	3	22	76	0	0	0	28	28	29.5	162.4
87	E87	5	2	3	F	41	49	10	0	0	0	N/A	N/A	37.9	6.7
88	E88	5	2	3	F	42	30	27	0	0	0	N/A	N/A	50.8	2.5
89	E89	1	1	2	B	2	7	38	37.8	14	0	37	128	106.8	63.9
90	E90	4	1	2	A	13	30	56	0	1	4	40	45	N/A	N/A
91	E91	1	3	2	E	21	13	67	0	0	0	8	36	14	184.2
92	E92	5	2	2	F	12	22	66	0	0	5	15	33	130	48
93	E93	1	4	1	B	10	3	71	7.7	8	0	4	78	28.8	25.9
94	E94	3	2	2	D	9	15	76	0	0	0	10	48	0	12.3
95	E95	2	2	1	C	4	12	54	3	26	30	26	46	N/A	N/A
96	E96	1	2	2	B	18	18	61	0	3	6	33	96	0	21.9
97	E97	3	3	3	E	6	27	67	0	0	0	51	75	14	41
98	E98	1	1	1	B	20	14	59	3.8	3	0	49	138	10.9	70.8
99	E99	1	2	1	D	13	20	61	0	6	3	25	65	10	73
100	E100	3	1	2	B	18	21	62	0	0	0	96	91	14	23
101	E101	1	2	2	D	9	17	74	0	0	0	38	59	0	19.8
102	E102	1	2	2	C	6	21	60	10.1	3	13	55	101	N/A	N/A
103	E103	1	2	2	E	5	29	66	0	0	1	28	68	N/A	N/A
104	E104	1	2	2	F	7	27	67	0	0	1	29	69	N/A	N/A
105	E105	2	2	1	F	22	9	69	0	0	0	15	9	N/A	N/A
106	E106	1	2	2	E	3	36	35	24.2	2	28	19	35	67.2	62.6
107	E107	1	2	2	F	0	29	71	0	0	0	24	39	0	5
108	E108	1	2	1	C	12	25	62	0	1	0	36	83	100	30
109	C1	1	3	2	D	1	27	72	0	1	0	22	34	36.6	18.7
110	C2	1	1	1	B	10	35	53	1.1	1	27	54	73	20	97
111	C3	1	3	2	B	9	21	60	0	10	12	80	48	0	24.1
112	C4	1	2	2	C	2	9	89	0	0	0	40	65	2.4	12.8
113	C5	1	2	2	D	3	21	34	41.5	0	0	22	37	N/A	N/A

No.	Code Name	Pool Char	Pool Compos	Invest Object	Mkt Val Size	% Cash 1981	% Bonds 1981	% Stocks 1981	% Real Estate 1981	% Miscel-laneous Assets 1981	% Non-Control-lable Assets 1981	6/30/81 # Bonds	6/30/81 # Stocks	1981 Bond Turn-Over %	1981 Stock Turn-Over %
114	C6	1	2	2	D	14	52	27	1.3	6	11	40	52	247.3	159.3
115	C7	3	1	1	A	71	18	12	0	0	0	24	47	95	164
116	C8	1	2	1	B	0	29	61	9	1	16	47	168	N/A	N/A
117	C9	1	2	2	A	20	34	44	2	1	0	N/A	N/A	N/A	N/A
118	C10	1	1	1	F	0	0	100	0	0	0	0	43	0	42.3
119	C11	2	2	1	E	26	0	74	0	0	0	0	15	N/A	33.4
120	C12	1	2	1	F	6	17	76	0.3	1	1	N/A	N/A	N/A	N/A
121	C13	2	3	1	D	11	27	62	0	0	0	66	33	6.5	79.5
122	C14	1	2	1	C	30	0	70	0	0	0	0	62	N/A	235
123	C15	1	2	1	A	20	16	57	6.3	0	0	62	88	9.3	7
124	C16	4	4	1	C	13	21	59	0	8	12	57	48	0	19.7
125	C17	1	2	2	C	14	33	53	0	1	4	104	193	66.5	37.3
126	C18	1	1	1	D	35	21	40	0	4	0	9	66	28	22
127	C19	1	3	2	D	5	48	48	0	0	0	66	41	0.7	0.7
128	C20	3	3	1	E	18	53	28	0	1	1	0	35	0	0.3
129	C21	1	2	2	C	24	37	39	0.2	0	0	42	41	8.8	58.3
130	C22	1	1	1	A	3	35	50	1.6	10	2	85	206	50.5	53
131	C23	1	2	3	E	3	28	53	0	16	6	29	48	37.5	18.2
132	C24	1	2	1	D	7	8	86	0	0	0	11	40	0	58.1
133	C25	4	2	2	A	3	21	76	0	0	0	24	160	72.1	39
134	C26	1	3	1	E	20	24	53	2.8	0	3	25	28	10.3	133.3
135	C27	1	2	2	D	14	36	50	0	0	0	58	33	1.7	36
136	C28	1	1	1	C	2	0	82	4.6	11	11	4	10	N/A	N/A
137	C29	1	2	2	A	15	20	62	3.3	0	6	67	162	90	80
138	C30	1	3	2	E	52	11	37	0	0	0	13	21	29	77
139	C31	1	2	2	B	11	12	61	0.4	15	0	21	62	20.4	19.8
140	C108	1	2	2	C	5	70	22	2.4	0	15	32	28	52	23
141	C33	5	2	3	F	0	49	51	0	0	0	41	31	0	23.9
142	C34	1	2	1	C	6	23	62	9	0	9	1	6	N/A	N/A
143	C35	1	2	1	C	8	1	59	9.6	21	7	3	51	23.8	54.2
144	C36	1	2	2	E	10	47	43	0	0	0	31	20	N/A	N/A
145	C37	1	2	3	F	3	71	26	0	0	0	20	12	N/A	N/A
146	C38	4	1	2	C	15	22	37	9	17	0	67	38	0	6.6
147	C39	3	2	2	E	7	40	52	0	1	0	30	40	264.1	47.2
148	C40	1	2	2	E	13	13	75	0	0	0	8	36	20.5	38.2
149	C41	1	2	2	D	7	20	69	2.9	2	5	43	50	0	14.5
150	C42	1	2	1	B	16	10	74	0	1	0	N/A	N/A	N/A	N/A
151	C43	4	1	1	F	33	0	67	0	0	0	0	17	N/A	1.1
152	C44	1	2	1	F	10	27	63	0	0	0	1	2	26.1	12.7

No.	Code Name	Pool Char	Pool Compos	Invest Object	Mkt Val Size	% Cash 1981	% Bonds 1981	% Stocks 1981	% Real Estate 1981	% Miscel-laneous Assets 1981	% Non-Control-lable Assets 1981	6/30/81 # Bonds	6/30/81 # Stocks	1981 Bond Turn-Over %	1981 Stock Turn-Over %
153	C45	1	2	1	D	3	28	70	0	0	0	49	70	17	10
154	C46	4	2	2	D	20	22	43	1.9	14	23	20	41	45.6	35.8
155	C47	1	2	2	D	14	36	50	0	0	0	58	33	1.7	36
156	C48	1	2	2	D	5	38	37	1	19	0	18	32	10	43
157	C49	1	2	2	D	1	47	53	0.2	0	0	0	0	N/A	N/A
158	C50	1	2	2	F	38	10	52	0	0	0	5	35	18.9	22.2
159	C51	1	2	2	F	16	25	59	0	0	0	3	21	0	22
160	C52	1	2	2	F	10	39	51	0	0	0	21	47	3.9	55.8
161	C53	1	2	2	F	14	34	52	0	0	0	17	30	17.8	27.5
162	C54	1	1	2	A	8	35	42	4.4	10	16	71	82	N/A	20.7
163	C55	1	3	2	A	4	15	79	2	0	0	82	123	4.1	5.3
164	C56	1	2	2	A	11	24	58	4.6	2	0	57	75	21.2	12.5
165	C57	1	1	1	C	28	17	53	0	2	2	9	51	10	69
166	C58	3	2	1	D	13	16	71	0	0	1	N/A	N/A	N/A	N/A
167	C59	1	3	2	B	16	43	42	0	0	0	262	101	0.4	1
168	C60	1	2	2	B	4	27	57	11.4	0	2	65	109	121.8	17.8
169	C61	1	3	2	A	7	48	44	0	0	0	746	151	0	6.3
170	C62	1	2	1	F	0	16	84	0	0	0	13	3	N/A	N/A
171	C63	1	2	1	C	2	16	82	0.2	0	1	25	65	34.5	17.9
172	C64	1	2	2	E	1	65	34	0	0	0	28	29	4.2	2.1
173	C65	1	3	2	C	35	17	47	0	0	0	68	56	13	12.1
174	C66	1	2	1	D	7	16	74	0	3	3	10	77	9	114
175	C67	1	2	3	E	17	56	27	0	0	0	31	40	0	6
176	C68	1	2	2	A	0	27	61	8.1	3	1	N/A	N/A	N/A	N/A
177	C105	3	3	2	F	15	39	46	0	0	0	14	28	0	14.6
178	C70	1	2	2	D	15	11	61	2	11	9	3	45	N/A	13
179	C71	1	3	1	D	13	8	61	0	18	0	12	72	N/A	N/A
180	C72	1	3	2	A	11	32	45	9.6	3	0	48	54	26.4	31.9
181	C73	1	3	2	F	6	43	52	0	0	0	20	33	15.8	74.8
182	C74	1	2	2	D	25	6	13	43.4	13	9	30	84	0	8.7
183	C75	1	3	1	E	18	21	60	0	0	0	18	61	19.8	32.8
184	C76	1	2	1	D	20	17	63	0	0	0	14	37	65.2	61.3
185	C77	1	2	1	A	3	5	92	0	0	0	35	124	10.6	8.5
186	C78	1	2	2	E	13	41	46	0	0	0	11	39	13.4	9.6
187	C79	1	2	2	D	2	41	57	0	0	0	59	38	39.8	19.9
188	C80	1	2	1	F	6	27	64	2.6	0	0	N/A	N/A	N/A	N/A
189	C81	1	2	2	C	6	7	77	7.9	2	9	23	76	7.2	11.3
190	C82	1	2	2	B	11	17	72	0	0	0	N/A	N/A	54	55
191	C83	1	2	1	D	40	23	37	0	0	0	1	53	N/A	17
192	C84	1	2	2	C	10	59	31	0	0	0	76	54	0	2.3

No.	Code Name	Pool Char	Pool Compos	Invest Object	Mkt Val Size	% Cash 1981	% Bonds 1981	% Stocks 1981	% Real Estate 1981	% Miscel-laneous Assets 1981	% Non-Controllable Assets 1981	6/30/81 # Bonds	6/30/81 # Stocks	1981 Bond Turn-Over %	1981 Stock Turn-Over %
193	C85	1	2	2	E	12	48	40	0	0	0	30	23	0	35
194	C86	1	3	1	E	14	43	43	0	0	0	18	55	8.9	4.3
195	C87	2	2	2	D	14	29	53	0	4	5	37	116	N/A	49
196	C88	1	2	2	D	13	30	37	0.2	20	20	39	33	6.1	12.3
197	C89	3	2	2	D	19	35	34	11.8	0	12	43	57	18	95.6
198	C90	1	2	2	C	61	33	6	0	0	0	N/A	N/A	0	0
199	C91	1	2	2	F	4	39	55	0	2	0	13	25	23.2	35.7
200	C92	1	2	2	E	23	41	30	2.6	4	15	30	13	6.1	18.7
201	C93	1	1	1	D	9	7	78	0	6	6	116	5	N/A	37
202	C94	1	2	2	D	3	4	17	49	27	20	3	63	28	24
203	C95	4	2	2	E	12	43	45	0	0	0	39	32	6.1	12.3
204	C96	1	2	2	B	5	38	55	0	2	4	37	46	22.6	50.9
205	C97	1	2	1	E	15	38	48	0	0	0	53	62	10	47
206	C98	1	3	1	D	26	20	51	2.1	0	3	5	21	0	20.9
207	C99	2	4	1	B	1	2	97	0	0	1	3	27	0	2.4
208	C100	3	2	2	D	24	19	56	0	0	0	21	34	29	97.8
209	C101	3	1	2	D	4	19	57	18.1	2	20	70	87	18.8	3.8
# ans		209	209	209	209	209	209		209	209	209	192	194	162	170
Average						12.6	25.0	57.6	2.2	2.6	2.7	27	53	15.8	28.0

EXHIBIT III

DETAILED PERFORMANCE SUMMARY

AVERAGE ANNUAL TOTAL RETURN

This exhibit shows in detail the average annual total return performance of all investment pools and various bond and equity indices for the one-, three-, five-, and ten-year periods ending June 30, 1981. For example, investment pool E89 for the one-year period had a return of 42.37%, which was the highest return among all pools and indices in the 1981 Comparative Performance Study. This pool had an average annual return of 16.21% for the three-year period and ranked thirty-seventh. Performance of pools is also ranked based on investment objective and investment size categories. Lastly, beta and efficiency measure ranking is shown for those pools with a least five years' data. The table below shows the number of pools participating based on the various groupings.

Number of Pools Participating

Grouping - Ending June 30, 1980	1 Years	3 Years	5 Years	10 Years
Page 82 - All Pools	198	187	176	127
Page 87 - Total Return	78	73	69	53
Page 89 - Balanced or Income Oriented	119	114	107	74
Page 92 - Over $50 Million	56	53	52	43
Page 94 - $10-$50 Million	85	81	76	59
Page 96 - Under $10 Million	56	53	48	25
Page 98 - Equity Only	29	22	17	N/A
Page 98 - Bond Only	21	15	9	N/A
Page 107- Beta and Efficiency	N/A	N/A	176	127

1981 NACUBO COMPARATIVE PERFORMANCE STUDY
ALL ENDOWMENT POOLS
AVERAGE ANNUAL TOTAL RETURN PERFORMANCE
FOR THE PERIOD ENDING JUNE 30, 1981

#	CODE NAME	EQ %*	SIZE	1 YEAR RETURN	#	3 YEAR RETURN	#	5 YEAR RETURN	#	10 YEAR RETURN
1	E94	78	D	35.42 %	1	30.31 %	1	17.30 %		N/A %
2	C11	84	E	33.97		N/A		N/A		N/A
3	E25	88	D	33.65	6	23.70	4	16.50	9	9.41
4	E5	82	A	32.82	2	25.21	5	16.43	18	8.23
5	C40	74	E	32.26	4	24.01	19	13.35	2	12.58
6	C63	80	C	31.26	5	23.87	3	17.03	17	8.70
7	E49	65	C	31.23	32	16.31	31	11.92	74	5.93
8	E54	73	C	31.21	3	24.17	2	17.10	14	8.82
9	E75	73	B	31.06	18	18.89	23	12.87	4	10.26
10	C74	12	D	30.38	22	18.50	20	13.25	6	10.09
11	E34	74	A	30.15	8	23.09	10	14.38	27	7.80
12	E50	45	C	29.57	33	16.26	40	11.02	115	4.60
13	C66	64	D	29.50	12	21.23	11	14.16		N/A
	COM-FDEQ	90	A	29.49		22.96		16.44		8.15
14	E12	42	F	27.74	9	22.36	25	12.76		N/A
15	E15	55	B	27.72	59	14.27	87	8.86	66	6.09
16	E16	64	D	26.85	36	16.15	35	11.54	35	7.20
17	C76	60	D	26.53	82	12.80	89	8.76	22	7.98
18	C44	58	F	26.38	37	16.03	18	13.36	49	6.65
19	E30	65	A	25.92	21	18.56	32	11.74	37	7.03
20	E26	76	C	25.85	7	23.14	8	14.82	31	7.38
21	E98	52	B	25.26	27	17.35	38	11.22	58	6.24
22	E58	72	C	25.21	64	14.14		N/A		N/A
23	E11	70	A	23.95	16	19.32		N/A		N/A
24	C28	78	C	23.57	19	18.75	16	13.50		N/A
25	E20	53	C	22.98	35	16.17	53	10.31	21	8.02
26	C24	78	D	22.82	28	16.92	22	12.89		N/A
27	E40	68	A	22.67	30	16.58	60	10.10	47	6.69
28	E48	54	E	22.21	50	15.05	17	13.39		N/A
29	C14	75	C	22.16	11	21.48		N/A		N/A
30	E36	54	A	21.86	26	17.88	30	12.29	39	6.95
31	C65	56	C	21.68	55	14.68	43	10.93	13	8.94
32	E105	67	F	21.59		N/A		N/A		N/A
33	C43	71	F	21.58	60	14.23	47	10.66		N/A
34	E6	57	B	21.44	61	14.20	110	8.03	32	7.33
35	E43	74	C	21.40	13	20.84	24	12.82	8	9.86
36	E45	68	A	20.99	25	17.89	28	12.48	26	7.86
	SP500			20.86		17.12		10.01		7.19
37	C100	57	D	20.80	134	10.24	98	8.45		N/A
38	E64	54	E	20.77	57	14.56	33	11.59	110	4.79
39	E81	55	D	20.72	70	13.71	81	8.92	104	4.88
	SP-IND			20.63		17.51		9.73		7.13

ALL ENDOWMENT POOLS
AVERAGE ANNUAL TOTAL RETURN PERFORMANCE
FOR THE PERIOD ENDING JUNE 30, 1981

#	CODE NAME	EQ %*	SIZE	1 YEAR RETURN	#	3 YEAR RETURN	#	5 YEAR RETURN	#	10 YEAR RETURN
40	C31	58	B	20.63 %	98	11.96 %	96	8.51 %		N/A %
41	E93	67	B	20.53	39	15.86	79	9.15		N/A
42	E4	64	D	20.50	86	12.75	107	8.18	93	5.30
43	E19	78	B	20.43	14	20.39	12	14.04	30	7.56
44	E52	73	D	20.36	42	15.44	63	9.80	75	5.91
45	C55	76	A	20.35	65	14.13	42	10.94	16	8.72
46	C35	60	C	20.30	17	19.11	7	15.27		N/A
47	C15	55	A	20.14	34	16.18	34	11.55	69	6.03
48	E42	56	E	20.13	110	11.34	50	10.48	72	5.95
49	E33	77	A	20.03	29	16.72	59	10.14	51	6.48
50	C62	80	F	19.66	106	11.55	72	9.38		N/A
51	C18	49	D	19.54	47	15.20	13	13.93	5	10.19
52	E62	66	D	19.53	72	13.49	62	9.90	52	6.48
	D-JONES			19.39		12.53		5.10		5.79
53	E27	65	B	19.36	56	14.60	83	8.89	63	6.09
54	C82	70	B	19.04	48	15.13	51	10.43	114	4.61
55	C25	73	A	18.98	24	18.15	39	11.09	15	8.76
56	E8	60	A	18.95	46	15.27	44	10.85	55	6.35
57	E61	63	D	18.84	129	10.33		N/A		N/A
58	E1	55	A	18.81	58	14.32	56	10.24	98	5.11
59	C45	65	D	18.69		N/A		N/A		N/A
60	C97	47	E	18.34	185	5.66	178	3.37	77	5.89
61	E24	61	D	18.24	117	10.77	64	9.62		N/A
62	C56	59	A	18.06	75	13.27	57	10.18	54	6.40
63	E10	65	D	17.72	97	11.97	131	7.25	111	4.66
64	E65	49	C	17.50	93	12.24	52	10.42	68	6.04
65	C93	64	D	17.31		N/A		N/A		N/A
66	E46	80	A	17.26	44	15.33	91	8.61	44	6.78
67	C42	73	B	17.18	51	14.99	73	9.35	81	5.78
68	C68	60	A	17.07		N/A		N/A		N/A
69	E21	75	A	17.01	49	15.11	58	10.16	48	6.67
70	E101	72	D	16.95	38	15.91	36	11.31		N/A
71	E37	58	B	16.71	31	16.49	46	10.69	24	7.90
72	E63	70	A	16.62	62	14.19	71	9.42	65	6.09
73	C77	92	A	16.53	20	18.72	27	12.58	7	9.94
74	C70	62	D	16.46	127	10.41	88	8.79	45	6.78
75	E29	60	A	16.42	67	13.79	54	10.31	117	4.55
76	C99**	95	B	16.34	53	14.75	6	16.28	1	27.61
77	E73	53	A	16.25	116	10.78	95	8.52	76	5.90
78	C13	56	D	16.22	63	14.17	45	10.82	11	9.03
79	C57	51	C	16.13	111	11.33	136	7.16	113	4.62
80	C98	59	D	16.13	43	15.37	14	13.93	3	12.36
81	E38	71	A	16.08	45	15.31	37	11.28	20	8.05
82	C23	52	E	16.03	10	21.71	9	14.44	128	3.80
83	E74	43	D	15.98	73	13.32	142	6.97		N/A
84	E91	54	E	15.86	74	13.29	97	8.50	97	5.17
85	E53	69	B	15.71	54	14.74	41	10.95	23	7.92
86	C71	57	D	15.63		N/A		N/A		N/A
87	E51	54	C	15.62	41	15.56	49	10.51	25	7.88
88	E56	61	A	15.50	68	13.76	85	8.88	59	6.20
89	E18	71	A	15.44	104	11.57	150	6.56	87	5.47
90	E55	66	C	15.30		N/A		N/A		N/A

ALL ENDOWMENT POOLS
AVERAGE ANNUAL TOTAL RETURN PERFORMANCE
FOR THE PERIOD ENDING JUNE 30, 1981

#	CODE NAME	EQ %*	SIZE	1 YEAR RETURN	#	3 YEAR RETURN	#	5 YEAR RETURN	#	10 YEAR RETURN
91	E72	58	A	15.12 %	89	12.60%	67	9.57 %	53	6.43%
92	C54	40	A	14.86	23	18.16	15	13.58	10	9.26
93	C2	53	B	14.86	83	12.78	101	8.42	28	7.72
94	E79	73	D	14.77	66	13.92	70	9.42	40	6.91
95	E68	62	C	14.29	80	12.83	78	9.16	99	5.03
96	C72	46	A	14.24	90	12.50	68	9.54	12	8.99
97	E69	59	B	14.14	147	9.46	180	2.78	125	4.07
98	C21	38	C	14.08	140	10.07	162	5.57	129	3.53
99	C34	55	C	14.07	95	12.21	99	8.44	91	5.32
100	E66	64	C	14.07	88	12.63	125	7.50		N/A
101	C22	49	A	14.05	77	13.10	74	9.34	61	6.16
102	E76	67	F	14.03	87	12.74	105	8.21		N/A
103	C46	40	D	13.93	155	9.09	117	7.70		N/A
104	E108	60	C	13.93	119	10.75	155	6.45	57	6.29
105	C95	40	E	13.77	96	12.13	76	9.22	46	6.76
106	C94	20	D	13.74	109	11.35	29	12.33		N/A
107	C58	67	D	13.66	78	12.92	119	7.67	95	5.22
108	C52	48	F	13.63	130	10.33	121	7.63	64	6.09
109	C38	38	C	13.59	148	9.33	65	9.60	19	8.09
110	E70	60	D	13.55	76	13.18	61	9.93		N/A
111	C51	60	F	13.52	91	12.36	92	8.59		N/A
112	C8	52	B	13.51	69	13.72	80	8.98		N/A
113	C30	49	E	13.50	124	10.45	126	7.50	62	6.10
114	E71	59	C	13.49	101	11.71	108	8.08	67	6.08
115	E96	57	B	13.45	92	12.36	69	9.49		N/A
116	E14	65	D	13.39	126	10.44	145	6.70	79	5.83
117	C89	34	D	13.37	166	7.98	138	7.10		N/A
118	E100	59	B	13.28	122	10.56		N/A		N/A
119	E103	62	E	13.27	141	10.07		N/A		N/A
120	E35	58	C	13.24	151	9.28	147	6.65	119	4.42
121	E44	53	F	13.17	107	11.53	149	6.56	88	5.38
122	E107	69	F	13.05	103	11.61	135	7.17	56	6.31
123	C4	86	C	13.00	52	14.91	48	10.56		N/A
124	E47	57	B	12.94		N/A		N/A		N/A
125	C17	52	C	12.93	114	11.21	94	8.54	100	5.01
126	E3	78	D	12.81	84	12.77	77	9.21	41	6.86
127	E85	46	B	12.74	100	11.77	93	8.54		N/A
128	E95	46	C	12.71	123	10.54	130	7.34	121	4.36
129	C87	42	D	12.50		N/A		N/A		N/A
130	E67	73	C	12.11	131	10.29	109	8.05	50	6.61
131	E23	48	F	12.03	105	11.56	127	7.47	103	4.93
132	C29	63	A	12.01	71	13.51	100	8.42	83	5.72
133	E9	25	E	11.95	167	7.96		N/A		N/A
134	C60	56	B	11.83	120	10.61	104	8.33	38	7.00
135	E90	52	A	11.78	118	10.76	86	8.86		N/A
136	E104	62	F	11.67	85	12.75		N/A		N/A
137	E99	65	D	11.63	40	15.86	21	12.97		N/A
138	C9	41	A	11.57	135	10.22	134	7.21	78	5.88
139	C1	69	D	11.47	128	10.38	102	8.39		N/A
140	C26	47	E	11.36		N/A		N/A		N/A

ALL ENDOWMENT POOLS
AVERAGE ANNUAL TOTAL RETURN PERFORMANCE
FOR THE PERIOD ENDING JUNE 30, 1981

#	CODE NAME	EQ %*	SIZE	1 YEAR RETURN	#	3 YEAR RETURN	#	5 YEAR RETURN	#	10 YEAR RETURN
141	E2	62	D	11.33%	108	11.36%	106	8.21 %	96	5.20 %
142	E89	35	B	11.30	15	19.93	26	12.64		N/A
143	E57	64	A	11.18	81	12.80	84	8.88	42	6.85
144	E84	35	F	11.09	115	11.13		N/A		N/A
145	E97	61	E	11.07	168	7.94	156	6.38	102	4.96
146	C83	34	D	10.85	145	9.57	123	7.54		N/A
147	C50	52	F	10.70	138	10.11	154	6.48	92	5.30
148	C86	42	E	10.69	137	10.15	75	9.26	34	7.24
149	C101	56	D	10.48		N/A		N/A		N/A
150	C53	53	F	10.33	102	11.66		N/A		N/A
151	C16	58	C	10.28	154	9.23	157	6.29	112	4.62
152	C75	62	E	10.21	132	10.29	115	7.70	85	5.54
153	E59	51	D	10.16	112	11.23	103	8.35	101	5.00
154	C27	50	D	10.07	149	9.30	118	7.67		N/A
155	E28	34	A	9.98	159	8.46	140	7.04	116	4.57
156	C12	72	F	9.84	169	7.71	161	5.76		N/A
157	E80	29	C	9.72	94	12.22	55	10.25	80	5.79
158	C7	9	A	9.62	146	9.52	143	6.96	127	3.86
159	C6	33	D	9.62	143	9.62	137	7.14	108	4.81
160	E32	49	C	9.61	160	8.41	90	8.76	90	5.36
161	C20	28	E	9.54	153	9.24	168	5.16	123	4.20
162	C39	43	E	9.46	152	9.26	124	7.52	133	2.14
163	C48	37	D	9.19	125	10.45	116	7.70	33	7.25
164	E82	37	F	9.18	170	7.60	133	7.21		N/A
165	E77	52	E	8.91	136	10.19	112	7.90	109	4.80
166	C64	32	E	8.85	173	7.13	153	6.50	70	6.00
167	E39	42	E	8.75	157	8.95	141	7.03	122	4.33
168	E86	64	C	8.69	113	11.22		N/A		N/A
169	C88	36	D	8.64	150	9.30	128	7.42	71	5.98
170	C3	59	B	8.54	164	8.21	164	5.42	89	5.37
171	E106	41	E	8.50		N/A		N/A		N/A
172	C78	45	E	8.17	162	8.33	158	6.05	132	2.89
173	E92	61	F	7.92	133	10.27	111	8.03	29	7.56
174	C5	32	D	7.78	163	8.24	139	7.05	60	6.20
175	E17	57	B	7.58	144	9.60	132	7.24	43	6.81
176	E13	39	E	7.48	181	6.16	171	4.98	94	5.28
177	C19	43	D	7.43	183	6.03	159	5.86		N/A
178	E31	53	A	7.40	139	10.07	122	7.59		N/A
179	C41	70	D	7.21	142	9.83	66	9.58	36	7.05
180	C80	65	F	7.19	121	10.60	146	6.69	124	4.10
181	C73	46	F	7.17	156	9.07	113	7.86		N/A
182	C79	55	D	6.63	171	7.54	151	6.54		N/A
183	C91	46	F	6.63	182	6.08	163	5.46	107	4.83
184	E83	43	F	6.59	176	6.84	144	6.88		N/A
185	C47	50	D	6.56	180	6.20	173	4.39	106	4.84

ALL ENDOWMENT POOLS
AVERAGE ANNUAL TOTAL RETURN PERFORMANCE
FOR THE PERIOD ENDING JUNE 30, 1981

#	CODE NAME	EQ %*	SIZE	1 YEAR RETURN	#	3 YEAR RETURN	#	5 YEAR RETURN	#	10 YEAR RETURN
186	C81	77	C	6.09%	79	12.91%		N/A %		N/A %
187	C36	40	E	6.05	165	8.05	166	5.28		N/A
188	C92	22	E	5.92	161	8.35	129	7.35		N/A
189	C49	49	D	5.83	177	6.68	167	5.20	131	3.19
190	C96	49	B	5.60	99	11.88	82	8.90		N/A
191	C33	48	F	5.43	184	5.72	170	5.10		N/A
192	E78	40	D	5.27	172	7.44	148	6.59	86	5.48
193	E41	34	D	5.07	178	6.59	165	5.34		N/A
194	C59	43	B	4.75		N/A		N/A		N/A
195	E22	42	D	4.54	187	5.05	160	5.79	82	5.74
196	C67	19	E	4.53	158	8.47	120	7.64	105	4.87
197	C61	43	A	4.31	179	6.42		N/A		N/A
198	C90	5	C	3.02		N/A		N/A		N/A
199	C69	43	F	2.44	174	7.11	152	6.53		N/A
200	C85	41	E	1.74	175	6.90	114	7.72	73	5.95
201	C84	33	C	1.72	186	5.35	174	4.36	118	4.51
202	C10	93	F	1.25	189	4.32	176	4.21		N/A
203	C32	19	C	0.51	190	4.19	169	5.11	84	5.69
204	C37	22	F	-0.20	188	4.74	175	4.24		N/A
205	E102	54	C	-1.28		N/A		N/A		N/A
206	E7	31	F	-2.00	192	3.38	181	1.06		N/A
207	E60	68	D	-2.65	191	3.89	177	3.86	130	3.49
208	E87	11	F	-3.39	193	1.05	172	4.79	126	4.06
209	E88	19	F	-5.10	194	-0.76	179	2.93	120	4.38
	LEH-KUHN			-9.53		-1.91		1.64		N/A
	COM-FDBD	0	B	-9.90		-0.59		N/A		N/A
	SALOMON			-14.11		-4.05		0.06		3.22
AVERAGE		209		14.64 %	194	12.49 %	181	9.06 %	133	6.45 %

POOLS WITH A
TOTAL RETURN INVESTMENT OBJECTIVE
AVERAGE ANNUAL TOTAL RETURN PERFORMANCE
FOR THE PERIOD ENDING JUNE 30, 1981

#	CODE NAME	EQ %*	SIZE	1 YEAR RETURN	#	3 YEAR RETURN	#	5 YEAR RETURN	#	10 YEAR RETURN
1	C11	84	E	33.97 %		N/A %		N/A %		N/A %
2	E25	88	D	33.65	4	23.70	3	16.50	6	9.41
3	E5	82	A	32.82	1	25.21	4	16.43	10	8.23
4	C63	80	C	31.26	3	23.87	2	17.03	9	8.70
5	E49	65	C	31.23	18	16.31	19	11.92	31	5.93
6	E54	73	C	31.21	2	24.17	1	17.10	8	8.82
7	E75	73	B	31.06	10	18.89	16	12.87	3	10.26
8	E50	45	C	29.57	19	16.26	24	11.02	47	4.60
9	C66	64	D	29.50	6	21.23	7	14.16		N/A
	COM-FDEQ	90	A	29.49		22.96		16.44		8.15
10	E16	64	D	26.85	22	16.15	22	11.54	18	7.20
11	C76	60	D	26.53	45	12.80	47	8.76	12	7.98
12	C44	58	F	26.38	23	16.03	13	13.36	21	6.65
13	E98	52	B	25.26	14	17.35	23	11.22	25	6.24
14	E11	70	A	23.95	8	19.32		N/A		N/A
15	C28	78	C	23.57	11	18.75	11	13.50		N/A
16	E20	53	C	22.98	21	16.17	31	10.31	11	8.02
17	C24	78	D	22.82	15	16.92	15	12.89		N/A
18	E40	68	A	22.67	17	16.58	34	10.10	20	6.69
19	E48	54	E	22.21	31	15.05	12	13.39		N/A
20	C14	75	C	22.16	5	21.48		N/A		N/A
21	E105	67	F	21.59		N/A		N/A		N/A
22	C43	71	F	21.58	36	14.23	27	10.66		N/A
23	E45	68	A	20.99	13	17.89	18	12.48	14	7.86
	SP500			20.86		17.12		10.01		7.19
24	E64	54	E	20.77	34	14.56	20	11.59	43	4.79
25	E81	55	D	20.72	41	13.71	46	8.92	42	4.88
	SP-IND			20.63		17.51		9.73		7.13
26	E93	67	B	20.53	24	15.86	44	9.15		N/A
27	E4	64	D	20.50	48	12.75	50	8.18	38	5.30
28	E19	78	B	20.43	7	20.39	8	14.04	16	7.56
29	E52	73	D	20.36	27	15.44	35	9.80	32	5.91
30	C35	60	C	20.30	9	19.11	6	15.27		N/A
31	C15	55	A	20.14	20	16.18	21	11.55	30	6.03
32	E33	77	A	20.03	16	16.72	33	10.14	22	6.48
33	C62	80	F	19.66	55	11.55	38	9.38		N/A
34	C18	49	D	19.54	30	15.20	9	13.93	4	10.19
	D-JONES			19.39		12.53		5.10		5.79
35	E8	60	A	18.95	29	15.27	25	10.85	23	6.35
36	E61	63	D	18.84	62	10.33		N/A		N/A
37	E1	55	A	18.81	35	14.32	32	10.24	40	5.11
38	C45	65	D	18.69		N/A		N/A		N/A
39	C97	47	E	18.34	72	5.66	68	3.37	33	5.89
40	E24	61	D	18.24	58	10.77	36	9.62		N/A

POOLS WITH A
TOTAL RETURN INVESTMENT OBJECTIVE
AVERAGE ANNUAL TOTAL RETURN PERFORMANCE
FOR THE PERIOD ENDING JUNE 30, 1981

#	CODE NAME	EQ %*	SIZE	1 YEAR RETURN	#	3 YEAR RETURN	#	5 YEAR RETURN	#	10 YEAR RETURN
41	E10	65	D	17.72 %	52	11.97 %	57	7.25 %	44	4.66 %
42	E65	49	C	17.50	50	12.24	29	10.42	29	6.04
43	C93	64	D	17.31		N/A		N/A		N/A
44	C42	73	B	17.18	32	14.99	39	9.35	34	5.78
45	E63	70	A	16.62	37	14.19	37	9.42	27	6.09
46	C77	92	A	16.53	12	18.72	17	12.58	5	9.94
47	E29	60	A	16.42	39	13.79	30	10.31	48	4.55
48	C99	95	B	16.34	33	14.75	5	16.28	1	27.61
49	C13	56	D	16.22	38	14.17	26	10.82	7	9.03
50	C98	59	D	16.13	28	15.37	10	13.93	2	12.36
51	C57	51	C	16.13	56	11.33	58	7.16	45	4.62
52	C71	57	D	15.63		N/A		N/A		N/A
53	E51	54	C	15.62	26	15.56	28	10.51	13	7.88
54	E18	71	A	15.44	54	11.57	62	6.56	36	5.47
55	E55	66	C	15.30		N/A		N/A		N/A
56	C2	53	B	14.86	46	12.78	49	8.42	15	7.72
57	E68	62	C	14.29	44	12.83	43	9.16	41	5.03
58	E69	59	B	14.14	67	9.46	69	2.78	53	4.07
59	E66	64	C	14.07	49	12.63	55	7.50		N/A
60	C34	55	C	14.07	51	12.21	48	8.44	37	5.32
61	C22	49	A	14.05	42	13.10	40	9.34	26	6.16
62	E108	60	C	13.93	59	10.75	63	6.45	24	6.29
63	C58	67	D	13.66	43	12.92	53	7.67	39	5.22
64	C8	52	B	13.51	40	13.72	45	8.98		N/A
65	E71	59	C	13.49	53	11.71	51	8.08	28	6.08
66	E47	57	B	12.94		N/A		N/A		N/A
67	E3	78	D	12.81	47	12.77	42	9.21	19	6.86
68	E95	46	C	12.71	61	10.54	56	7.34	49	4.36
69	E99	65	D	11.63	25	15.86	14	12.97		N/A
70	C26	47	E	11.36		N/A		N/A		N/A
71	C83	34	D	10.85	65	9.57	54	7.54		N/A
72	C86	42	E	10.69	64	10.15	41	9.26	17	7.24
73	C16	58	C	10.28	69	9.23	64	6.29	46	4.62
74	C75	62	E	10.21	63	10.29	52	7.70	35	5.54
75	C12	72	F	9.84	71	7.71	65	5.76		N/A
76	C7	9	A	9.62	66	9.52	60	6.96	54	3.86
77	C20	28	E	9.54	68	9.24	66	5.16	51	4.20
78	E39	42	E	8.75	70	8.95	59	7.03	50	4.33
79	E86	64	C	8.69	57	11.22		N/A		N/A
80	C80	65	F	7.19	60	10.60	61	6.69	52	4.10
81	C10	93	F	1.25	73	4.32	67	4.21		N/A
82	E7	31	F	-2.00	74	3.38	70	1.06		N/A
	LEH-KUHN			-9.53		-1.91		1.64		N/A
	COM-FDBD	0	B	-9.90		-0.59		N/A		N/A
	SALOMON			-14.11		-4.05		0.06		3.22
AVERAGE		82		18.19 %	74	14.19 %	70	10.00 %	54	6.85 %

POOLS WITH A
BALANCED OR INCOME INVESTMENT OBJECTIVE
AVERAGE ANNUAL TOTAL RETURN PERFORMANCE
FOR THE PERIOD ENDING JUNE 30, 1981

#	CODE NAME	EQ %*	SIZE	1 YEAR RETURN	#	3 YEAR RETURN	#	5 YEAR RETURN	#	10 YEAR RETURN
1	E94	78	D	35.42 %	1	30.31 %	1	17.30 %		N/A %
2	C40	74	E	32.26	2	24.01	6	13.35	1	12.58
3	C74	12	D	30.38	10	18.50	7	13.25	2	10.09
4	E34	74	A	30.15	4	23.09	4	14.38	13	7.80
	COM-FDEQ	90	A	29.49		22.96		16.44		8.15
5	E12	42	F	27.74	5	22.36	9	12.76		N/A
6	E15	55	B	27.72	24	14.27	40	8.86	38	6.09
7	E30	65	A	25.92	9	18.56	13	11.74	19	7.03
8	E26	76	C	25.85	3	23.14	2	14.82	15	7.38
9	E58	72	C	25.21	26	14.14		N/A		N/A
10	E36	54	A	21.86	13	17.88	12	12.29	21	6.95
11	C65	56	C	21.68	22	14.68	19	10.93	6	8.94
12	E6	57	B	21.44	25	14.20	59	8.03	16	7.33
13	E43	74	C	21.40	7	20.84	8	12.82	3	9.86
	SP500			20.86		17.12		10.01		7.19
14	C100	57	D	20.80	71	10.24	51	8.45		N/A
	SP-IND			20.63		17.51		9.73		7.13
15	C31	58	B	20.63	46	11.96	49	8.51		N/A
16	C55	76	A	20.35	27	14.13	18	10.94	8	8.72
17	E42	56	E	20.13	55	11.34	22	10.48	43	5.95
18	E62	66	D	19.53	31	13.49	28	9.90	30	6.48
	D-JONES			19.39		12.53		5.10		5.79
19	E27	65	B	19.36	23	14.60	37	8.89	37	6.09
20	C82	70	B	19.04	18	15.13	23	10.43	68	4.61
21	C25	73	A	18.98	12	18.15	16	11.09	7	8.76
22	C56	59	A	18.06	34	13.27	25	10.18	32	6.40
23	E46	80	A	17.26	16	15.33	44	8.61	26	6.78
24	C68	60	A	17.07		N/A		N/A		N/A
25	E21	75	A	17.01	19	15.11	26	10.16	28	6.67
26	E101	72	D	16.95	15	15.91	14	11.31		N/A
27	E37	58	B	16.71	14	16.49	20	10.69	12	7.90
28	C70	62	D	16.46	66	10.41	42	8.79	25	6.78
29	E73	53	A	16.25	59	10.78	48	8.52	44	5.90
30	E38	71	A	16.08	17	15.31	15	11.28	10	8.05
31	C23	52	E	16.03	6	21.71	3	14.44	74	3.80
32	E74	43	D	15.98	32	13.32	83	6.97		N/A
33	E91	54	E	15.86	33	13.29	50	8.50	58	5.17
34	E53	69	B	15.71	21	14.74	17	10.95	11	7.92
35	E56	61	A	15.50	29	13.76	38	8.88	35	6.20
36	E72	58	A	15.12	40	12.60	31	9.57	31	6.43
37	C54	40	A	14.86	11	18.16	5	13.58	4	9.26
38	E79	73	D	14.77	28	13.92	34	9.42	22	6.91
39	C72	46	A	14.24	41	12.50	32	9.54	5	8.99
40	C21	38	C	14.08	75	10.07	97	5.57	75	3.53

POOLS WITH A BALANCED OR INCOME INVESTMENT OBJECTIVE AVERAGE ANNUAL TOTAL RETURN PERFORMANCE FOR THE PERIOD ENDING JUNE 30, 1981

#	CODE NAME	EQ %*	SIZE	1 YEAR RETURN	#	3 YEAR RETURN	#	5 YEAR RETURN	#	10 YEAR RETURN
41	E76	67	F	14.03 %	39	12.74 %	57	8.21 %		N/A %
42	C46	40	D	13.93	86	9.09	65	7.70		N/A
43	C95	40	E	13.77	45	12.13	35	9.22	27	6.76
44	C94	20	D	13.74	54	11.35	11	12.33		N/A
45	C52	48	F	13.63	68	10.33	68	7.63	39	6.09
46	C38	38	C	13.59	81	9.33	29	9.60	9	8.09
47	E70	60	D	13.55	35	13.18	27	9.93		N/A
48	C51	60	F	13.52	43	12.36	45	8.59		N/A
49	C30	49	E	13.50	63	10.45	71	7.50	36	6.10
50	E96	57	B	13.45	42	12.36	33	9.49		N/A
51	E14	65	D	13.39	65	10.44	85	6.70	46	5.83
52	C89	34	D	13.37	96	7.98	80	7.10		N/A
53	E100	59	B	13.28	62	10.56		N/A		N/A
54	E103	62	E	13.27	77	10.07		N/A		N/A
55	E35	58	C	13.24	84	9.28	86	6.65	71	4.42
56	E44	53	F	13.17	52	11.53	88	6.56	52	5.38
57	E107	69	F	13.05	50	11.61	78	7.17	33	6.31
58	C4	86	C	13.00	20	14.91	21	10.56		N/A
59	C17	52	C	12.93	57	11.21	47	8.54	59	5.01
60	E85	46	B	12.74	48	11.77	46	8.54		N/A
61	C87	42	D	12.50		N/A		N/A		N/A
62	E67	73	C	12.11	69	10.29	58	8.05	29	6.61
63	E23	48	F	12.03	51	11.56	72	7.47	62	4.93
64	C29	63	A	12.01	30	13.51	52	8.42	49	5.72
65	E9	25	E	11.95	97	7.96		N/A		N/A
66	C60	56	B	11.83	61	10.61	55	8.33	20	7.00
67	E90	52	A	11.78	60	10.76	41	8.86		N/A
68	E104	62	F	11.67	38	12.75		N/A		N/A
69	C9	41	A	11.57	72	10.22	77	7.21	45	5.88
70	C1	69	D	11.47	67	10.38	53	8.39		N/A
71	E2	62	D	11.33	53	11.36	56	8.21	57	5.20
72	E89	35	B	11.30	8	19.93	10	12.64		N/A
73	E57	64	A	11.18	37	12.80	39	8.88	23	6.85
74	E84	35	F	11.09	58	11.13		N/A		N/A
75	E97	61	E	11.07	98	7.94	93	6.38	61	4.96
76	C50	52	F	10.70	74	10.11	92	6.48	55	5.30
77	C101	56	D	10.48		N/A		N/A		N/A
78	C53	53	F	10.33	49	11.66		N/A		N/A
79	E59	51	D	10.16	56	11.23	54	8.35	60	5.00
80	C27	50	D	10.07	82	9.30	66	7.67		N/A

POOLS WITH A
BALANCED OR INCOME INVESTMENT OBJECTIVE
AVERAGE ANNUAL TOTAL RETURN PERFORMANCE
FOR THE PERIOD ENDING JUNE 30, 1981

#	CODE NAME	EQ %*	SIZE	1 YEAR RETURN	#	3 YEAR RETURN	#	5 YEAR RETURN	#	10 YEAR RETURN
81	E28	34	A	9.98 %	89	8.46 %	82	7.04 %	69	4.57 %
82	E80	29	C	9.72	44	12.22	24	10.25	47	5.79
83	C6	33	D	9.62	79	9.62	79	7.14	66	4.81
84	E32	49	C	9.61	90	8.41	43	8.76	54	5.36
85	C39	43	E	9.46	85	9.26	70	7.52	79	2.14
86	C48	37	D	9.19	64	10.45	64	7.70	17	7.25
87	E82	37	F	9.18	99	7.60	76	7.21		N/A
88	E77	52	E	8.91	73	10.19	61	7.90	67	4.80
89	C64	32	E	8.85	102	7.13	91	6.50	40	6.00
90	C88	36	D	8.64	83	9.30	73	7.42	41	5.98
91	C3	59	B	8.54	94	8.21	99	5.42	53	5.37
92	E106	41	E	8.50		N/A		N/A		N/A
93	C78	45	E	8.17	92	8.33	94	6.05	78	2.89
94	E92	61	F	7.92	70	10.27	60	8.03	14	7.56
95	C5	32	D	7.78	93	8.24	81	7.05	34	6.20
96	E17	57	B	7.58	80	9.60	75	7.24	24	6.81
97	E13	39	E	7.48	110	6.16	105	4.98	56	5.28
98	C19	43	D	7.43	112	6.03	95	5.86		N/A
99	E31	53	A	7.40	76	10.07	69	7.59		N/A
100	C41	70	D	7.21	78	9.83	30	9.58	18	7.05
101	C73	46	F	7.17	87	9.07	62	7.86		N/A
102	C79	55	D	6.63	100	7.54	89	6.54		N/A
103	C91	46	F	6.63	111	6.08	98	5.46	65	4.83
104	E83	43	F	6.59	105	6.84	84	6.88		N/A
105	C47	50	D	6.56	109	6.20	107	4.39	64	4.84
106	C81	77	C	6.09	36	12.91		N/A		N/A
107	C36	40	E	6.05	95	8.05	101	5.28		N/A
108	C92	22	E	5.92	91	8.35	74	7.35		N/A
109	C49	49	D	5.83	106	6.68	102	5.20	77	3.19
110	C96	49	B	5.60	47	11.88	36	8.90		N/A
111	C33	48	F	5.43	113	5.72	104	5.10		N/A
112	E78	40	D	5.27	101	7.44	87	6.59	51	5.48
113	E41	34	D	5.07	107	6.59	100	5.34		N/A
114	C59	43	B	4.75		N/A		N/A		N/A
115	E22	42	D	4.54	115	5.05	96	5.79	48	5.74
116	C67	19	E	4.53	88	8.47	67	7.64	63	4.87
117	C61	43	A	4.31	108	6.42		N/A		N/A
118	C90	5	C	3.02		N/A		N/A		N/A
119	C69	43	F	2.44	103	7.11	90	6.53		N/A
120	C85	41	E	1.74	104	6.90	63	7.72	42	5.95
121	C84	33	C	1.72	114	5.35	108	4.36	70	4.51
122	C32	19	C	0.51	117	4.19	103	5.11	50	5.69
123	C37	22	F	-0.20	116	4.74	109	4.24		N/A
124	E102	54	C	-1.28		N/A		N/A		N/A
125	E60	68	D	-2.65	118	3.89	110	3.86	76	3.49
126	E87	11	F	-3.39	119	1.05	106	4.79	73	4.06
127	E88	19	F	-5.10	120	-0.76	111	2.93	72	4.38
	LEH-KUHN			-9.53		-1.91		1.64		N/A
	COM-FDBD	0	B	-9.90		-0.59		N/A		N/A
	SALOMON			-14.11		-4.05		0.06		3.22
AVERAGE		127		12.36 %	120	11.44 %	111	8.47 %	79	6.17 %

INVESTMENT POOLS OVER $50 MILLION
AVERAGE ANNUAL TOTAL RETURN PERFORMANCE
FOR THE PERIOD ENDING JUNE 30, 1981

#	CODE NAME	EQ %*	SIZE	1 YEAR RETURN	#	3 YEAR RETURN	#	5 YEAR RETURN	#	10 YEAR RETURN
1	E5	82	A	32.82 %	1	25.21%	1	16.43%	8	8.23 %
2	E75	73	B	31.06	6	18.89	6	12.87	2	10.26
3	E34	74	A	30.15	2	23.09	3	14.38	13	7.80
	COM-FDEQ	90	A	29.49		22.96		16.44		8.15
4	E15	55	B	27.72	29	14.27	40	8.86	34	6.09
5	E30	65	A	25.92	8	18.56	11	11.74	17	7.03
6	E98	52	B	25.26	13	17.35	14	11.22	29	6.24
7	E11	70	A	23.95	5	19.32		N/A		N/A
8	E40	68	A	22.67	15	16.58	26	10.10	23	6.69
9	E36	54	A	21.86	12	17.88	10	12.29	19	6.95
10	E6	57	B	21.44	30	14.20	48	8.03	16	7.33
11	E45	68	A	20.99	11	17.89	9	12.48	12	7.86
	SP500			20.86		17.12		10.01		7.19
	SP-IND			20.63		17.51		9.73		7.13
12	C31	58	B	20.63	44	11.96	44	8.51		N/A
13	E93	67	B	20.53	18	15.86	33	9.15		N/A
14	E19	78	B	20.43	3	20.39	4	14.04	15	7.56
15	C55	76	A	20.35	32	14.13	17	10.94	7	8.72
16	C15	55	A	20.14	17	16.18	12	11.55	35	6.03
17	E33	77	A	20.03	14	16.72	25	10.14	25	6.48
	D-JONES			19.39		12.53		5.10		5.79
18	E27	65	B	19.36	27	14.60	36	8.89	32	6.09
19	C82	70	B	19.04	22	15.13	20	10.43	43	4.61
20	C25	73	A	18.98	10	18.15	15	11.09	6	8.76
21	E8	60	A	18.95	21	15.27	18	10.85	28	6.35
22	E1	55	A	18.81	28	14.32	22	10.24	42	5.11
23	C56	59	A	18.06	37	13.27	23	10.18	27	6.40
24	E46	80	A	17.26	19	15.33	41	8.61	22	6.78
25	C42	73	B	17.18	24	14.99	31	9.35	38	5.78
26	C68	60	A	17.07		N/A		N/A		N/A
27	E21	75	A	17.01	23	15.11	24	10.16	24	6.67
28	E37	58	B	16.71	16	16.49	19	10.69	11	7.90
29	E63	70	A	16.62	31	14.19	30	9.42	33	6.09
30	C77	92	A	16.53	7	18.72	8	12.58	3	9.94
31	E29	60	A	16.42	33	13.79	21	10.31	45	4.55
32	C99	95	B	16.34	25	14.75	2	16.28	1	27.61
33	E73	53	A	16.25	48	10.78	43	8.52	36	5.90
34	E38	71	A	16.08	20	15.31	13	11.28	9	8.05
35	E53	69	B	15.71	26	14.74	16	10.95	10	7.92
36	E56	61	A	15.50	34	13.76	38	8.88	30	6.20
37	E18	71	A	15.44	47	11.57	54	6.56	40	5.47
38	E72	58	A	15.12	41	12.60	27	9.57	26	6.43
39	C2	53	B	14.86	40	12.78	46	8.42	14	7.72
40	C54	40	A	14.86	9	18.16	5	13.58	4	9.26

INVESTMENT POOLS OVER $50 MILLION
AVERAGE ANNUAL TOTAL RETURN PERFORMANCE
FOR THE PERIOD ENDING JUNE 30, 1981

#	CODE NAME	EQ %*	SIZE	1 YEAR RETURN	#	3 YEAR RETURN	#	5 YEAR RETURN	#	10 YEAR RETURN
41	C72	46	A	14.24 %	42	12.50 %	28	9.54 %	5	8.99 %
42	E69	59	B	14.14	56	9.46	56	2.78	46	4.07
43	C22	49	A	14.05	38	13.10	32	9.34	31	6.16
44	C8	52	B	13.51	35	13.72	34	8.98		N/A
45	E96	57	B	13.45	43	12.36	29	9.49		N/A
46	E100	59	B	13.28	51	10.56		N/A		N/A
47	E47	57	B	12.94		N/A		N/A		N/A
48	E85	46	B	12.74	46	11.77	42	8.54		N/A
49	C29	63	A	12.01	36	13.51	45	8.42	39	5.72
50	C60	56	B	11.83	50	10.61	47	8.33	18	7.00
51	E90	52	A	11.78	49	10.76	39	8.86		N/A
52	C9	41	A	11.57	52	10.22	51	7.21	37	5.88
53	E89	35	B	11.30	4	19.93	7	12.64		N/A
54	E57	64	A	11.18	39	12.80	37	8.88	20	6.85
55	E28	34	A	9.98	57	8.46	52	7.04	44	4.57
56	C7	9	A	9.62	55	9.52	53	6.96	47	3.86
57	C3	59	B	8.54	58	8.21	55	5.42	41	5.37
58	E17	57	B	7.58	54	9.60	50	7.24	21	6.81
59	E31	53	A	7.40	53	10.07	49	7.59		N/A
60	C96	49	B	5.60	45	11.88	35	8.90		N/A
61	C59	43	B	4.75		N/A		N/A		N/A
62	C61	43	A	4.31	59	6.42		N/A		N/A
	LEH-KUHN			-9.53		-1.91		1.64		N/A
	COM-FDBD	0	B	-9.90		-0.59		N/A		N/A
	SALOMON			-14.11		-4.05		0.06		3.22
AVERAGE		62		16.61 %	59	14.37 %	56	9.92 %	47	7.19 %

INVESTMENT POOLS $10-$50 MILLION
AVERAGE ANNUAL TOTAL RETURN PERFORMANCE
FOR THE PERIOD ENDING JUNE 30, 1981

#	CODE NAME	EQ %*	SIZE	1 YEAR RETURN	#	3 YEAR RETURN	#	5 YEAR RETURN	#	10 YEAR RETURN
1	E94	78	D	35.42%	1	30.31%	1	17.30%		N/A%
2	E25	88	D	33.65	4	23.70	4	16.50	5	9.41
3	C63	80	C	31.26	3	23.87	3	17.03	9	8.70
4	E49	65	C	31.23	13	16.31	16	11.92	28	5.93
5	E54	73	C	31.21	2	24.17	2	17.10	8	8.82
6	C74	12	D	30.38	11	18.50	11	13.25	3	10.09
7	E50	45	C	29.57	14	16.26	19	11.02	49	4.60
8	C66	64	D	29.50	7	21.23	7	14.16		N/A
	COM-FDEQ	90	A	29.49		22.96		16.44		8.15
9	E16	64	D	26.85	16	16.15	17	11.54	16	7.20
10	C76	60	D	26.53	35	12.80	38	8.76	12	7.98
11	E26	76	C	25.85	5	23.14	6	14.82	14	7.38
12	E58	72	C	25.21	26	14.14		N/A		N/A
13	C28	78	C	23.57	10	18.75	10	13.50		N/A
14	E20	53	C	22.98	15	16.17	25	10.31	11	8.02
15	C24	78	D	22.82	12	16.92	13	12.89		N/A
16	C14	75	C	22.16	6	21.48		N/A		N/A
17	C65	56	C	21.68	24	14.68	20	10.93	7	8.94
18	E43	74	C	21.40	8	20.84	14	12.82	4	9.86
	SP500			20.86		17.12		10.01		7.19
19	C100	57	D	20.80	59	10.24	41	8.45		N/A
20	E81	55	D	20.72	28	13.71	36	8.92	43	4.88
	SP-IND			20.63		17.51		9.73		7.13
21	E4	64	D	20.50	37	12.75	46	8.18	37	5.30
22	E52	73	D	20.36	20	15.44	29	9.80	29	5.91
23	C35	60	C	20.30	9	19.11	5	15.27		N/A
24	C18	49	D	19.54	22	15.20	9	13.93	2	10.19
25	E62	66	D	19.53	29	13.49	28	9.90	22	6.48
	D-JONES			19.39		12.53		5.10		5.79
26	E61	63	D	18.84	57	10.33		N/A		N/A
27	C45	65	D	18.69		N/A		N/A		N/A
28	E24	61	D	18.24	50	10.77	30	9.62		N/A
29	E10	65	D	17.72	42	11.97	57	7.25	46	4.66
30	E65	49	C	17.50	39	12.24	24	10.42	26	6.04
31	C93	64	D	17.31		N/A		N/A		N/A
32	E101	72	D	16.95	17	15.91	18	11.31		N/A
33	C70	62	D	16.46	55	10.41	37	8.79	20	6.78
34	C13	56	D	16.22	25	14.17	21	10.82	6	9.03
35	C98	59	D	16.13	21	15.37	8	13.93	1	12.36
36	C57	51	C	16.13	46	11.33	58	7.16	48	4.62
37	E74	43	D	15.98	30	13.32	62	6.97		N/A
38	C71	57	D	15.63		N/A		N/A		N/A
39	E51	54	C	15.62	19	15.56	23	10.51	13	7.88
40	E55	66	C	15.30		N/A		N/A		N/A
41	E79	73	D	14.77	27	13.92	33	9.42	18	6.91
42	E68	62	C	14.29	34	12.83	35	9.16	40	5.03

INVESTMENT POOLS $10-$50 MILLION
AVERAGE ANNUAL TOTAL RETURN PERFORMANCE
FOR THE PERIOD ENDING JUNE 30, 1981

#	CODE NAME	EQ %*	SIZE	1 YEAR RETURN	#	3 YEAR RETURN	#	5 YEAR RETURN	#	10 YEAR RETURN
43	C21	38	C	14.08 %	60	10.07 %	71	5.57 %	53	3.53 %
44	C34	55	C	14.07	41	12.21	42	8.44	36	5.32
45	E66	64	C	14.07	38	12.63	54	7.50		N/A
46	C46	40	D	13.93	69	9.09	49	7.70		N/A
47	E108	60	C	13.93	51	10.75	67	6.45	23	6.29
48	C94	20	D	13.74	45	11.35	15	12.33		N/A
49	C58	67	D	13.66	32	12.92	52	7.67	38	5.22
50	C38	38	C	13.59	64	9.33	31	9.60	10	8.09
51	E70	60	D	13.55	31	13.18	27	9.93		N/A
52	E71	59	C	13.49	43	11.71	47	8.08	25	6.08
53	E14	65	D	13.39	54	10.44	63	6.70	30	5.83
54	C89	34	D	13.37	72	7.98	60	7.10		N/A
55	E35	58	C	13.24	67	9.28	64	6.65	51	4.42
56	C4	86	C	13.00	23	14.91	22	10.56		N/A
57	C17	52	C	12.93	49	11.21	40	8.54	41	5.01
58	E3	78	D	12.81	36	12.77	34	9.21	19	6.86
59	E95	46	C	12.71	52	10.54	56	7.34	52	4.36
60	C87	42	D	12.50		N/A		N/A		N/A
61	E67	73	C	12.11	58	10.29	48	8.05	21	6.61
62	E99	65	D	11.63	18	15.86	12	12.97		N/A
63	C1	69	D	11.47	56	10.38	43	8.39		N/A
64	E2	62	D	11.33	44	11.36	45	8.21	39	5.20
65	C83	34	D	10.85	63	9.57	53	7.54		N/A
66	C101	56	D	10.48		N/A		N/A		N/A
67	C16	58	C	10.28	68	9.23	68	6.29	47	4.62
68	E59	51	D	10.16	47	11.23	44	8.35	42	5.00
69	C27	50	D	10.07	66	9.30	51	7.67		N/A
70	E80	29	C	9.72	40	12.22	26	10.25	31	5.79
71	C6	33	D	9.62	62	9.62	59	7.14	45	4.81
72	E32	49	C	9.61	70	8.41	39	8.76	35	5.36
73	C48	37	D	9.19	53	10.45	50	7.70	15	7.25
74	E86	64	C	8.69	48	11.22		N/A		N/A
75	C88	36	D	8.64	65	9.30	55	7.42	27	5.98
76	C5	32	D	7.78	71	8.24	61	7.05	24	6.20
77	C19	43	D	7.43	78	6.03	69	5.86		N/A
78	C41	70	D	7.21	61	9.83	32	9.58	17	7.05
79	C79	55	D	6.63	73	7.54	66	6.54		N/A
80	C47	50	D	6.56	77	6.20	75	4.39	44	4.84
81	C81	77	C	6.09	33	12.91		N/A		N/A
82	C49	49	D	5.83	75	6.68	73	5.20	55	3.19
83	E78	40	D	5.27	74	7.44	65	6.59	34	5.48
84	E41	34	D	5.07	76	6.59	72	5.34		N/A
85	E22	42	D	4.54	80	5.05	70	5.79	32	5.74
86	C90	5	C	3.02		N/A		N/A		N/A
87	C84	33	C	1.72	79	5.35	76	4.36	50	4.51
88	C32	19	C	0.51	81	4.19	74	5.11	33	5.69
89	E102	54	C	-1.28		N/A		N/A		N/A
90	E60	68	D	-2.65	82	3.89	77	3.86	54	3.49
	LEH-KUHN			-9.53		-1.91		1.64		N/A
	COM-FDBD	0	B	-9.90		-0.59		N/A		N/A
	SALOMON			-14.11		-4.05		0.06		3.22
AVERAGE		90		15.27%	82	12.76%	77	9.37%	55	6.38%

INVESTMENT POOLS UNDER $10 MILLION
AVERAGE ANNUAL TOTAL RETURN PERFORMANCE
FOR THE PERIOD ENDING JUNE 30, 1981

#	CODE NAME	EQ %*	SIZE	1 YEAR RETURN	#	3 YEAR RETURN	#	5 YEAR RETURN	#	10 YEAR RETURN
1	C11	84	E	33.97%		N/A%		N/A%		N/A%
2	C40	74	E	32.26	1	24.01	4	13.35	1	12.58
	COM-FDEQ	90	A	29.49		22.96		16.44		8.15
3	E12	42	F	27.74	2	22.36	5	12.76		N/A
4	C44	58	F	26.38	4	16.03	3	13.36	5	6.65
5	E48	54	E	22.21	5	15.05	2	13.39		N/A
6	E105	67	F	21.59		N/A		N/A		N/A
7	C43	71	F	21.58	7	14.23	7	10.66		N/A
	SP500			20.86		17.12		10.01		7.19
8	E64	54	E	20.77	6	14.56	6	11.59	23	4.79
	SP-IND			20.63		17.51		9.73		7.13
9	E42	56	E	20.13	18	11.34	8	10.48	11	5.95
10	C62	80	F	19.66	16	11.55	9	9.38		N/A
	D-JONES			19.39		12.53		5.10		5.79
11	C97	47	E	18.34	48	5.66	46	3.37	12	5.89
12	C23	52	E	16.03	3	21.71	1	14.44	29	3.80
13	E91	54	E	15.86	8	13.29	13	8.50	17	5.17
14	E76	67	F	14.03	10	12.74	14	8.21		N/A
15	C95	40	E	13.77	12	12.13	11	9.22	4	6.76
16	C52	48	F	13.63	22	10.33	21	7.63	8	6.09
17	C51	60	F	13.52	11	12.36	12	8.59		N/A
18	C30	49	E	13.50	21	10.45	23	7.50	7	6.10
19	E103	62	E	13.27	28	10.07		N/A		N/A
20	E44	53	F	13.17	17	11.53	31	6.56	14	5.38
21	E107	69	F	13.05	14	11.61	27	7.17	6	6.31
22	E23	48	F	12.03	15	11.56	24	7.47	19	4.93
23	E9	25	E	11.95	37	7.96		N/A		N/A
24	E104	62	F	11.67	9	12.75		N/A		N/A
25	C26	47	E	11.36		N/A		N/A		N/A
26	E84	35	F	11.09	19	11.13		N/A		N/A
27	E97	61	E	11.07	38	7.94	35	6.38	18	4.96
28	C50	52	F	10.70	27	10.11	34	6.48	15	5.30
29	C86	42	E	10.69	26	10.15	10	9.26	3	7.24
30	C53	53	F	10.33	13	11.66		N/A		N/A
31	C75	62	E	10.21	23	10.29	19	7.70	13	5.54
32	C12	72	F	9.84	39	7.71	37	5.76		N/A
33	C20	28	E	9.54	30	9.24	40	5.16	26	4.20
34	C39	43	E	9.46	29	9.26	22	7.52	31	2.14
35	E82	37	F	9.18	40	7.60	26	7.21		N/A
36	E77	52	E	8.91	25	10.19	16	7.90	22	4.80
37	C64	32	E	8.85	41	7.13	33	6.50	9	6.00
38	E39	42	E	8.75	32	8.95	28	7.03	25	4.33
39	E106	41	E	8.50		N/A		N/A		N/A
40	C78	45	E	8.17	35	8.33	36	6.05	30	2.89

INVESTMENT POOLS UNDER $10 MILLION
AVERAGE ANNUAL TOTAL RETURN PERFORMANCE
FOR THE PERIOD ENDING JUNE 30, 1981

#	CODE NAME	EQ %*	SIZE	1 YEAR RETURN	#	3 YEAR RETURN	#	5 YEAR RETURN	#	10 YEAR RETURN
41	E92	61	F	7.92 %	24	10.27 %	15	8.03 %	2	7.56 %
42	E13	39	E	7.48	45	6.16	42	4.98	16	5.28
43	C80	65	F	7.19	20	10.60	30	6.69	27	4.10
44	C73	46	F	7.17	31	9.07	17	7.86		N/A
45	C91	46	F	6.63	46	6.08	38	5.46	21	4.83
46	E83	43	F	6.59	44	6.84	29	6.88		N/A
47	C36	40	E	6.05	36	8.05	39	5.28		N/A
48	C92	22	E	5.92	34	8.35	25	7.35		N/A
49	C33	48	F	5.43	47	5.72	41	5.10		N/A
50	C67	19	E	4.53	33	8.47	20	7.64	20	4.87
51	C69	43	F	2.44	42	7.11	32	6.53		N/A
52	C85	41	E	1.74	43	6.90	18	7.72	10	5.95
53	C10	93	F	1.25	50	4.32	45	4.21		N/A
54	C37	22	F	-0.20	49	4.74	44	4.24		N/A
55	E7	31	F	-2.00	51	3.38	48	1.06		N/A
56	E87	11	F	-3.39	52	1.05	43	4.79	28	4.06
57	E88	19	F	-5.10	53	-0.76	47	2.93	24	4.38
	LEH-KUHN			-9.53		-1.91		1.64		N/A
	COM-FDBD	0	B	-9.90		-0.59		N/A		N/A
	SALOMON			-14.11		-4.05		0.06		3.22
	AVERAGE	57		11.52 %	53	9.99%	48	7.57%	31	5.45%

ENDOWMENT POOLS 70% OR MORE IN EQUITY AVERAGE ANNUAL TOTAL RETURN PERFORMANCE FOR THE PERIOD ENDING JUNE 30, 1981

#	CODE NAME	EQ %*	SIZE	1 YEAR RETURN	#	3 YEAR RETURN	#	5 YEAR RETURN	#	10 YEAR RETURN
1	E94	78	D	35.42%	1	30.31%	1	17.30%		N/A%
2	C11	84	E	33.97		N/A		N/A		N/A
3	E25	88	D	33.65	6	23.70	4	16.50	6	9.41
4	E5	82	A	32.82	2	25.21	5	16.43	11	8.23
5	C40	74	E	32.26	4	24.01	11	13.35	2	12.58
6	C63	80	C	31.26	5	23.87	3	17.03	10	8.70
7	E54	73	C	31.21	3	24.17	2	17.10	7	8.82
8	E75	73	B	31.06	13	18.89	13	12.87	3	10.26
9	E34	74	A	30.15	8	23.09	8	14.38	13	7.80
	COM-FDEQ	90	A	29.49		22.96		16.44		8.15
10	E26	76	C	25.85	7	23.14	7	14.82	15	7.38
11	E58	72	C	25.21	30	14.14		N/A		N/A
12	E11	70	A	23.95	12	19.32		N/A		N/A
13	C28	78	C	23.57	14	18.75	10	13.50		N/A
14	C24	78	D	22.82	17	16.92	12	12.89		N/A
15	C14	75	C	22.16	9	21.48		N/A		N/A
16	C43	71	F	21.58	28	14.23	20	10.66		N/A
17	E43	74	C	21.40	10	20.84	14	12.82	5	9.86
	SP500			20.86		17.12		10.01		7.19
	SP-IND			20.63		17.51		9.73		7.13
18	E19	78	B	20.43	11	20.39	9	14.04	14	7.56
19	E52	73	D	20.36	20	15.44	25	9.80	24	5.91
20	C55	76	A	20.35	31	14.13	19	10.94	9	8.72
21	E33	77	A	20.03	18	16.72	24	10.14	22	6.48
22	C62	80	F	19.66	36	11.55	29	9.38		N/A
	D-JONES			19.39		12.53		5.10		5.79
23	C82	70	B	19.04	23	15.13	22	10.43	27	4.61
24	C25	73	A	18.98	16	18.15	18	11.09	8	8.76
25	E46	80	A	17.26	21	15.33	32	8.61	19	6.78
26	C42	73	B	17.18	25	14.99	30	9.35	25	5.78
27	E21	75	A	17.01	24	15.11	23	10.16	20	6.67
28	E101	72	D	16.95	19	15.91	16	11.31		N/A
29	E63	70	A	16.62	29	14.19	28	9.42	23	6.09
30	C77	92	A	16.53	15	18.72	15	12.58	4	9.94
31	C99	95	B	16.34	27	14.75	6	16.28	1	27.61
32	E38	71	A	16.08	22	15.31	17	11.28	12	8.05
33	E18	71	A	15.44	35	11.57	34	6.56	26	5.47
34	E79	73	D	14.77	32	13.92	27	9.42	17	6.91
35	C4	86	C	13.00	26	14.91	21	10.56		N/A

ENDOWMENT POOLS 70% OR MORE IN EQUITY
AVERAGE ANNUAL TOTAL RETURN PERFORMANCE
FOR THE PERIOD ENDING JUNE 30, 1981

#	CODE NAME	EQ %*	SIZE	1 YEAR RETURN	#	3 YEAR RETURN	#	5 YEAR RETURN	#	10 YEAR RETURN
36	E3	78	D	12.81 %	34	12.77 %	31	9.21 %	18	6.86 %
37	E67	73	C	12.11	37	10.29	33	8.05	21	6.61
38	C12	72	F	9.84	39	7.71	35	5.76		N/A
39	C41	70	D	7.21	38	9.83	26	9.58	16	7.05
40	C81	77	C	6.09	33	12.91		N/A		N/A
41	C10	93	F	1.25	40	4.32	36	4.21		N/A
	LEH-KUHN			-9.53		-1.91		1.64		N/A
	COM-FDBD	0	B	-9.90		-0.59		N/A		N/A
	SALOMON			-14.11		-4.05		0.06		3.22
	AVERAGE	41		20.58 %	40	16.90 %	36	11.61 %	27	8.48 %

ENDOWMENT POOLS 55% TO 70% IN EQUITY AVERAGE ANNUAL TOTAL RETURN PERFORMANCE FOR THE PERIOD ENDING JUNE 30, 1981

#	CODE NAME	EQ %*	SIZE	1 YEAR RETURN	#	3 YEAR RETURN	#	5 YEAR RETURN	#	10 YEAR RETURN
1	E49	65	C	31.23 %	7	16.31 %	7	11.92 %	30	5.93 %
2	C66	64	D	29.50	1	21.23	2	14.16		N/A
	COM-FDEQ	90	A	29.49		22.96		16.44		8.15
3	E15	55	B	27.72	19	14.27	32	8.86	26	6.09
4	E16	64	D	26.85	9	16.15	10	11.54	10	7.20
5	C76	60	D	26.53	32	12.80	34	8.76	4	7.98
6	C44	58	F	26.38	10	16.03	4	13.36	17	6.65
7	E30	65	A	25.92	3	18.56	8	11.74	11	7.03
8	E40	68	A	22.67	5	16.58	20	10.10	16	6.69
9	C65	56	C	21.68	16	14.68	12	10.93	3	8.94
10	E105	67	F	21.59		N/A		N/A		N/A
11	E6	57	B	21.44	20	14.20	47	8.03	9	7.33
12	E45	68	A	20.99	4	17.89	6	12.48	7	7.86
	SP500			20.86		17.12		10.01		7.19
13	C100	57	D	20.80	59	10.24	37	8.45		N/A
14	E81	55	D	20.72	24	13.71	28	8.92	42	4.88
	SP-IND			20.63		17.51		9.73		7.13
15	C31	58	B	20.63	42	11.96	36	8.51		N/A
16	E93	67	B	20.53	12	15.86	27	9.15		N/A
17	E4	64	D	20.50	33	12.75	44	8.18	36	5.30
18	C35	60	C	20.30	2	19.11	1	15.27		N/A
19	C15	55	A	20.14	8	16.18	9	11.55	28	6.03
20	E42	56	E	20.13	46	11.34	16	10.48	29	5.95
21	E62	66	D	19.53	26	13.49	22	9.90	18	6.48
	D-JONES			19.39		12.53		5.10		5.79
22	E27	65	B	19.36	17	14.60	29	8.89	25	6.09
23	E8	60	A	18.95	14	15.27	13	10.85	21	6.35
24	E61	63	D	18.84	56	10.33		N/A		N/A
25	E1	55	A	18.81	18	14.32	18	10.24	39	5.11
26	C45	65	D	18.69		N/A		N/A		N/A
27	E24	61	D	18.24	48	10.77	23	9.62		N/A
28	C56	59	A	18.06	27	13.27	19	10.18	20	6.40
29	E10	65	D	17.72	41	11.97	51	7.25	43	4.66
30	C93	64	D	17.31		N/A		N/A		N/A
31	C68	60	A	17.07		N/A		N/A		N/A
32	E37	58	B	16.71	6	16.49	15	10.69	6	7.90
33	C70	62	D	16.46	54	10.41	33	8.79	15	6.78
34	E29	60	A	16.42	22	13.79	17	10.31	45	4.55
35	C13	56	D	16.22	21	14.17	14	10.82	2	9.03
36	C98	59	D	16.13	13	15.37	3	13.93	1	12.36
37	E53	69	B	15.71	15	14.74	11	10.95	5	7.92
38	C71	57	D	15.63		N/A		N/A		N/A

ENDOWMENT POOLS 55% TO 70% IN EQUITY AVERAGE ANNUAL TOTAL RETURN PERFORMANCE FOR THE PERIOD ENDING JUNE 30, 1981

#	CODE NAME	EQ %*	SIZE	1 YEAR RETURN	#	3 YEAR RETURN	#	5 YEAR RETURN	#	10 YEAR RETURN
39	E56	61	A	15.50%	23	13.76%	31	8.88%	24	6.20%
40	E55	66	C	15.30		N/A		N/A		N/A
41	E72	58	A	15.12	37	12.60	24	9.57	19	6.43
42	E68	62	C	14.29	30	12.83	26	9.16	40	5.03
43	E69	59	B	14.14	62	9.46	63	2.78	48	4.07
44	C34	55	C	14.07	40	12.21	38	8.44	35	5.32
45	E66	64	C	14.07	36	12.63	50	7.50		N/A
46	E76	67	F	14.03	35	12.74	43	8.21		N/A
47	E108	60	C	13.93	49	10.75	58	6.45	23	6.29
48	C58	67	D	13.66	29	12.92	49	7.67	37	5.22
49	E70	60	D	13.55	28	13.18	21	9.93		N/A
50	C51	60	F	13.52	39	12.36	35	8.59		N/A
51	E71	59	C	13.49	43	11.71	45	8.08	27	6.08
52	E96	57	B	13.45	38	12.36	25	9.49		N/A
53	E14	65	D	13.39	53	10.44	54	6.70	31	5.83
54	E100	59	B	13.28	52	10.56		N/A		N/A
55	E103	62	E	13.27	60	10.07		N/A		N/A
56	E35	58	C	13.24	63	9.28	56	6.65	46	4.42
57	E107	69	F	13.05	44	11.61	53	7.17	22	6.31
58	E47	57	B	12.94		N/A		N/A		N/A
59	C29	63	A	12.01	25	13.51	39	8.42	32	5.72
60	C60	56	B	11.83	50	10.61	41	8.33	12	7.00
61	E104	62	F	11.67	34	12.75		N/A		N/A
62	E99	65	D	11.63	11	15.86	5	12.97		N/A
63	C1	69	D	11.47	55	10.38	40	8.39		N/A
64	E2	62	D	11.33	45	11.36	42	8.21	38	5.20
65	E57	64	A	11.18	31	12.80	30	8.88	13	6.85
66	E97	61	E	11.07	66	7.94	59	6.38	41	4.96
67	C101	56	D	10.48		N/A		N/A		N/A
68	C16	58	C	10.28	64	9.23	60	6.29	44	4.62
69	C75	62	E	10.21	57	10.29	48	7.70	33	5.54
70	E86	64	C	8.69	47	11.22		N/A		N/A
71	C3	59	B	8.54	65	8.21	61	5.42	34	5.37
72	E92	61	F	7.92	58	10.27	46	8.03	8	7.56
73	E17	57	B	7.58	61	9.60	52	7.24	14	6.81
74	C80	65	F	7.19	51	10.60	55	6.69	47	4.10
75	C79	55	D	6.63	67	7.54	57	6.54		N/A
76	E60	68	D	-2.65	68	3.89	62	3.86	49	3.49
	LEH-KUHN			-9.53		-1.91		1.64		N/A
	COM-FDBD	0	B	-9.90		-0.59		N/A		N/A
	SALOMON			-14.11		-4.05		0.06		3.22
	AVERAGE	76		16.14%	68	12.74%	63	9.10%	49	6.24%

ENDOWMENT POOLS UNDER 55% IN EQUITY AVERAGE ANNUAL TOTAL RETURN PERFORMANCE FOR THE PERIOD ENDING JUNE 30, 1981

#	CODE NAME	EQ %*	SIZE	1 YEAR RETURN	#	3 YEAR RETURN	#	5 YEAR RETURN	#	10 YEAR RETURN
41	E89	35	B	11.30 %	3	19.93 %	7	12.64 %		N/A %
42	E84	35	F	11.09	32	11.13		N/A		N/A
43	C83	34	D	10.85	46	9.57	41	7.54		N/A
44	C50	52	F	10.70	42	10.11	63	6.48	31	5.30
45	C86	42	E	10.69	41	10.15	20	9.26	10	7.24
46	C53	53	F	10.33	25	11.66		N/A		N/A
47	E59	51	D	10.16	30	11.23	31	8.35	35	5.00
48	C27	50	D	10.07	50	9.30	37	7.67		N/A
49	E28	34	A	9.98	57	8.46	54	7.04	45	4.57
50	E80	29	C	9.72	21	12.22	16	10.25	25	5.79
51	C6	33	D	9.62	45	9.62	51	7.14	40	4.81
52	C7	9	A	9.62	47	9.52	57	6.96	52	3.86
53	E32	49	C	9.61	58	8.41	25	8.76	30	5.36
54	C20	28	E	9.54	52	9.24	72	5.16	50	4.20
55	C39	43	E	9.46	51	9.26	42	7.52	57	2.14
56	C48	37	D	9.19	37	10.45	36	7.70	9	7.25
57	E82	37	F	9.18	65	7.60	49	7.21		N/A
58	E77	52	E	8.91	40	10.19	32	7.90	41	4.80
59	C64	32	E	8.85	67	7.13	62	6.50	19	6.00
60	E39	42	E	8.75	55	8.95	55	7.03	49	4.33
61	C88	36	D	8.64	49	9.30	45	7.42	20	5.98
62	E106	41	E	8.50		N/A		N/A		N/A
63	C78	45	E	8.17	60	8.33	64	6.05	56	2.89
64	C5	32	D	7.78	61	8.24	53	7.05	14	6.20
65	E13	39	E	7.48	75	6.16	75	4.98	32	5.28
66	C19	43	D	7.43	77	6.03	65	5.86		N/A
67	E31	53	A	7.40	44	10.07	40	7.59		N/A
68	C73	46	F	7.17	54	9.07	33	7.86		N/A
69	C91	46	F	6.63	76	6.08	68	5.46	39	4.83
70	E83	43	F	6.59	70	6.84	58	6.88		N/A
71	C47	50	D	6.56	74	6.20	77	4.39	38	4.84
72	C36	40	E	6.05	62	8.05	70	5.28		N/A
73	C92	22	E	5.92	59	8.35	46	7.35		N/A
74	C49	49	D	5.83	71	6.68	71	5.20	55	3.19
75	C96	49	B	5.60	23	11.88	23	8.90		N/A
76	C33	48	F	5.43	78	5.72	74	5.10		N/A
77	E78	40	D	5.27	66	7.44	59	6.59	28	5.48
78	E41	34	D	5.07	72	6.59	69	5.34		N/A
79	C59	43	B	4.75		N/A		N/A		N/A
80	E22	42	D	4.54	81	5.05	66	5.79	26	5.74
81	C67	19	E	4.53	56	8.47	38	7.64	37	4.87
82	C61	43	A	4.31	73	6.42		N/A		N/A
83	C90	5	C	3.02		N/A		N/A		N/A
84	C69	43	F	2.44	68	7.11	61	6.53		N/A
85	C85	41	E	1.74	69	6.90	34	7.72	21	5.95

ENDOWMENT POOLS UNDER 55% IN EQUITY
AVERAGE ANNUAL TOTAL RETURN PERFORMANCE
FOR THE PERIOD ENDING JUNE 30, 1981

#	CODE NAME	EQ %*	SIZE	1 YEAR RETURN	#	3 YEAR RETURN	#	5 YEAR RETURN	#	10 YEAR RETURN
86	C84	33	C	1.72 %	80	5.35 %	78	4.36 %	46	4.51 %
87	C32	19	C	0.51	83	4.19	73	5.11	27	5.69
88	C37	22	F	-0.20	82	4.74	79	4.24		N/A
89	E102	54	C	-1.28		N/A		N/A		N/A
90	E7	31	F	-2.00	84	3.38	82	1.06		N/A
91	E87	11	F	-3.39	85	1.05	76	4.79	51	4.06
92	E88	19	F	-5.10	86	-0.76	81	2.93	47	4.38
	LEH-KUHN			-9.53		-1.91		1.64		N/A
	COM-FDBD	0	B	-9.90		-0.59		N/A		N/A
	SALOMON			-14.11		-4.05		0.06		3.22
AVERAGE		92		10.77 %	86	10.24%	82	7.92%	57	5.67%

ENDOWMENT POOLS UNDER 55% IN EQUITY
AVERAGE ANNUAL TOTAL RETURN PERFORMANCE
FOR THE PERIOD ENDING JUNE 30, 1981

#	CODE NAME	EQ %*	SIZE	1 YEAR RETURN	#	3 YEAR RETURN	#	5 YEAR RETURN	#	10 YEAR RETURN
1	C74	12	D	30.38%	4	18.50%	5	13.25%	2	10.09%
2	E50	45	C	29.57	8	16.26	12	11.02	44	4.60
	COM-FDEQ	90	A	29.49		22.96		16.44		8.15
3	E12	42	F	27.74	1	22.36	6	12.76		N/A
4	E98	52	B	25.26	7	17.35	11	11.22	13	6.24
5	E20	53	C	22.98	9	16.17	15	10.31	6	8.02
6	E48	54	E	22.21	12	15.05	4	13.39		N/A
7	E36	54	A	21.86	6	17.88	9	12.29	11	6.95
	SP500			20.86		17.12		10.01		7.19
8	E64	54	E	20.77	13	14.56	10	11.59	42	4.79
	SP-IND			20.63		17.51		9.73		7.13
9	C18	49	D	19.54	11	15.20	2	13.93	1	10.19
	D-JONES			19.39		12.53		5.10		5.79
10	C97	47	E	18.34	79	5.66	80	3.37	23	5.89
11	E65	49	C	17.50	20	12.24	14	10.42	18	6.04
12	E73	53	A	16.25	33	10.78	28	8.52	22	5.90
13	C57	51	C	16.13	29	11.33	50	7.16	43	4.62
14	C23	52	E	16.03	2	21.71	1	14.44	53	3.80
15	E74	43	D	15.98	15	13.32	56	6.97		N/A
16	E91	54	E	15.86	16	13.29	29	8.50	33	5.17
17	E51	54	C	15.62	10	15.56	13	10.51	7	7.88
18	C54	40	A	14.86	5	18.16	3	13.58	3	9.26
19	C2	53	B	14.86	18	12.78	30	8.42	8	7.72
20	C72	46	A	14.24	19	12.50	18	9.54	4	8.99
21	C21	38	C	14.08	43	10.07	67	5.57	54	3.53
22	C22	49	A	14.05	17	13.10	19	9.34	15	6.16
23	C46	40	D	13.93	53	9.09	35	7.70		N/A
24	C95	40	E	13.77	22	12.13	21	9.22	12	6.76
25	C94	20	D	13.74	28	11.35	8	12.33		N/A
26	C52	48	F	13.63	38	10.33	39	7.63	17	6.09
27	C38	38	C	13.59	48	9.33	17	9.60	5	8.09
28	C8	52	B	13.51	14	13.72	22	8.98		N/A
29	C30	49	E	13.50	36	10.45	43	7.50	16	6.10
30	C89	34	D	13.37	63	7.98	52	7.10		N/A
31	E44	53	F	13.17	27	11.53	60	6.56	29	5.38
32	C17	52	C	12.93	31	11.21	27	8.54	34	5.01
33	E85	46	B	12.74	24	11.77	26	8.54		N/A
34	E95	46	C	12.71	35	10.54	47	7.34	48	4.36
35	C87	42	J	12.50		N/A		N/A		N/A
36	E23	48	F	12.03	26	11.56	44	7.47	36	4.93
37	E9	25	E	11.95	64	7.96		N/A		N/A
38	E90	52	A	11.78	34	10.76	24	8.86		N/A
39	C9	41	A	11.57	39	10.22	48	7.21	24	5.88
40	C26	47	E	11.36		N/A		N/A		N/A

EQUITY ONLY AND BOND ONLY PERFORMANCE COMPARISON FOR THE THREE-YEAR PERIOD ENDING JUNE 30, 1981

	Code Name	Total Return
1	EQUITY32	27.16%
2	EQUITY2	24.46
3	COM-FDEQ	22.96
4	EQUITY13	22.65
5	EQUITY30	22.16
6	EQUITY5	22.09
7	EQUITY15	21.35
8	EQUITY25	21.28
9	EQUITY9	20.42
10	EQUITY6	19.91
11	EQUITY12	19.80
12	EQUITY31	19.27
13	EQUITY7	18.81
14	EQUITY4	18.14
15	EQUITY21	17.70
16	SP-IND	17.51
17	EQUITY29	17.43
18	SP500	17.12
19	EQUITY20	16.58
20	EQUITY35	16.09
21	EQUITY8	15.52
22	EQUITY18	14.75
23	EQUITY27	13.50
24	EQUITY19	12.80
25	D-JONES	12.53
26	EQUITY3	12.11
27	EQUITY14	12.09
28	EQUITY11	11.15
29	EQUITY24	11.04
30	EQUITY26	10.59
31	EQUITY28	10.29
32	EQUITY16	7.44
33	EQUITY1	4.35
34	COM-FDBD	-0.59
35	LEH-KUHN	-1.91
36	SALOMON	-4.05

AVERAGE OF 29 POOLS 16.58%

	Code Name	Total Return
1	COM-FDEQ	22.96%
2	SP-IND	17.51
3	SP500	17.12
4	BOND24	13.34
5	D-JONES	12.53
6	BOND1	8.69
7	BOND21	7.87
8	BOND19	7.72
9	BOND27	6.54
10	BOND2	6.39
11	BOND14	5.64
12	BOND25	4.75
13	BOND12	4.57
14	BOND18	3.83
15	BOND9	2.64
16	BOND5	2.54
17	BOND8	1.91
18	BOND3	1.72
19	BOND15	1.62
20	BOND4	1.10
21	COM-FDBD	-0.59
22	LEH-KUHN	-1.91
23	BOND6	-3.52
24	BOND16	-3.66
25	SALOMON	-4.05
26	BOND17	-7.31
27	BOND26	-7.94
28	BOND20	-11.93

AVERAGE OF 21 POOLS 2.21%

EQUITY ONLY AND BOND ONLY PERFORMANCE COMPARISON FOR THE FIVE-YEAR PERIOD ENDING JUNE 30, 1981

	Code Name	Total Return
1	EQUITY30	23.37%
2	COM-FDEQ	16.44
3	EQUITY32	14.83
4	EQUITY13	13.94
5	EQUITY31	13.73
6	EQUITY9	13.18
7	EQUITY5	11.79
8	EQUITY21	11.52
9	EQUITY35	11.30
10	EQUITY8	10.97
11	EQUITY15	10.88
12	EQUITY19	10.57
13	EQUITY3	10.49
14	SP500	10.01
15	EQUITY29	9.91
16	SP-IND	9.73
17	EQUITY7	9.54
18	EQUITY20	9.42
19	EQUITY24	9.34
20	EQUITY28	8.82
21	EQUITY27	8.45
22	EQUITY18	7.90
23	EQUITY14	6.76
24	EQUITY26	6.73
25	EQUITY11	5.84
26	D-JONES	5.10
27	EQUITY1	3.57
28	LEH-KUHN	1.64
29	SALOMON	0.06

AVERAGE of 23 POOLS

	Code Name	Total Return
1	BOND16	22.85%
2	COM-FDEQ	16.44
3	BOND1	10.33
4	SP500	10.01
5	SP-IND	9.73
6	BOND24	7.90
7	BOND21	7.31
8	BOND19	6.87
9	BOND14	5.91
10	BOND27	5.84
11	BOND25	5.46
12	BOND18	5.27
13	D-JONES	5.10
14	BOND5	4.23
15	BOND15	4.17
16	BOND4	4.03
17	BOND8	3.76
18	BOND9	3.69
19	BOND17	3.17
20	LEH-KUHN	1.64
21	BOND6	0.46
22	SALOMON	0.06
23	BOND26	-1.68

AVERAGE OF 17 POOLS 5.86%

ALL INVESTMENT POOLS
RANKING BY EFFICIENCY AND BETA
FOR THE PERIOD ENDING JUNE 30, 1981

#	CODE NAME	EQ %*	SIZE	5 YEAR EFFIC	#	10 YEAR EFFIC	#	5 YEAR BETA	#	10 YEAR BETA
1	C99	95	B	2.49 %	2	1.01 %	179	-0.21 %	133	-0.85 %
2	C98	59	D	2.47	1	1.08	147	0.21	129	0.23
3	C94	20	D	1.50		N/A	175	-0.09		N/A
4	C35	60	C	1.26		N/A	85	0.52		N/A
5	C63	80	C	0.87	17	0.12	12	1.03	4	1.27
6	E54	73	C	0.84	16	0.13	11	1.06	3	1.30
	COM-FDEQ	0	C	0.80		0.08		0.97		1.24
7	C18	49	D	0.80	5	0.29	144	0.24	93	0.62
8	E48	54	E	0.78		N/A	118	0.35		N/A
9	E25	88	D	0.70	12	0.17	7	1.16	6	1.19
10	E5	82	A	0.67	18	0.09	4	1.29	1	1.45
11	E19	78	B	0.65	29	0.02	28	0.85	11	1.00
12	C28	78	C	0.63		N/A	36	0.78		N/A
13	C54	40	A	0.62	10	0.19	90	0.50	96	0.61
14	E99	65	D	0.61		N/A	115	0.38		N/A
15	C44	58	F	0.60	32	0.00	84	0.52	24	0.91
16	E94	78	D	0.59		N/A	1	1.73		N/A
17	E26	76	C	0.59	27	0.02	8	1.11	5	1.21
18	C24	78	D	0.59		N/A	63	0.64		N/A
19	C66	64	D	0.53		N/A	9	1.09		N/A
20	E34	74	A	0.50	22	0.05	5	1.27	8	1.11
21	E45	68	A	0.46	24	0.04	41	0.75	20	0.92
22	C77	92	A	0.45	6	0.24	34	0.80	22	0.92
23	E36	54	A	0.44	38	-0.07	31	0.82	73	0.72
24	C74	12	D	0.43	4	0.30	32	0.82	124	0.35
25	E64	54	E	0.42	47	-0.11	95	0.47	7	1.17
26	E43	74	C	0.40	7	0.23	14	1.01	21	0.92
27	C15	55	A	0.38	46	-0.11	52	0.68	12	1.00
28	C13	56	D	0.36	9	0.20	92	0.49	111	0.53
29	E75	73	B	0.36	8	0.21	18	0.95	2	1.40
30	E38	71	A	0.35	20	0.05	73	0.58	43	0.82
31	C40	74	E	0.35	3	0.43	2	1.48	17	0.94
32	C23	52	E	0.34	59	-0.14	6	1.16	13	0.98
33	E12	42	F	0.34		N/A	3	1.31		N/A
34	E53	69	B	0.34	25	0.04	75	0.55	49	0.79
35	E101	72	D	0.33		N/A	55	0.67		N/A
36	C55	76	A	0.32	14	0.14	80	0.53	89	0.63
37	E80	29	C	0.32	81	-0.21	145	0.23	78	0.70
38	E16	64	D	0.30	36	-0.04	37	0.78	72	0.72
39	E49	65	C	0.30	44	-0.09	35	0.79	9	1.10
40	C65	56	C	0.28	13	0.16	65	0.63	80	0.68
41	E30	65	A	0.28	35	-0.04	10	1.07	18	0.94
42	E89	35	B	0.28		N/A	13	1.02		N/A
43	E8	60	A	0.28	50	-0.12	56	0.67	33	0.86
44	E65	49	C	0.26	70	-0.17	117	0.36	71	0.73
45	E98	52	B	0.25	52	-0.13	22	0.91	30	0.89

ALL INVESTMENT POOLS
RANKING BY EFFICIENCY AND BETA
FOR THE PERIOD ENDING JUNE 30, 1981

#	CODE NAME	EQ %*	SIZE	5 YEAR EFFICIENCY	#	10 YEAR EFFICIENCY	#	5 YEAR BETA	#	10 YEAR BETA
46	C25	73	A	0.24 %	15	0.13 %	19	0.94 %	58	0.75 %
47	E42	56	E	0.23	66	-0.16	129	0.29	79	0.68
48	C43	71	F	0.22		N/A	69	0.60		N/A
49	C4	86	C	0.22		N/A	72	0.58		N/A
50	E37	58	B	0.22	26	0.03	39	0.77	81	0.67
51	E51	54	C	0.21	28	0.02	64	0.64	97	0.61
52	E50	45	C	0.21	77	-0.19	21	0.92	16	0.95
53	E29	60	A	0.20	96	-0.27	88	0.52	32	0.87
54	C82	70	B	0.20	87	-0.24	51	0.69	10	1.04
55	C56	59	A	0.19	61	-0.15	94	0.48	69	0.73
56	E1	55	A	0.17	80	-0.20	62	0.64	15	0.95
57	E20	53	C	0.15	21	0.05	25	0.89	37	0.84
58	E21	75	A	0.15	42	-0.09	42	0.71	44	0.81
59	E70	60	D	0.15		N/A	97	0.45		N/A
60	E33	77	A	0.13	48	-0.12	24	0.90	47	0.81
61	C41	70	D	0.13	37	-0.05	168	0.01	75	0.70
62	E40	68	A	0.12	39	-0.07	15	0.98	14	0.98
63	E62	66	D	0.12	67	-0.16	74	0.57	91	0.62
	SP500			0.11		-0.03		1.00		1.00
64	C38	38	C	0.09	23	0.05	167	0.02	125	0.34
65	E52	73	D	0.09	64	-0.15	29	0.83	29	0.89
	SP-IND			0.08		-0.03		1.08		1.00
66	E24	61	D	0.07		N/A	140	0.25		N/A
67	E72	58	A	0.07	62	-0.15	98	0.45	61	0.75
68	C72	46	A	0.06	11	0.19	106	0.41	110	0.54
69	E96	57	B	0.05		N/A	107	0.41		N/A
70	E63	70	A	0.04	56	-0.13	59	0.66	40	0.84
71	E79	73	D	0.03	41	-0.08	66	0.63	56	0.77
72	C42	73	B	0.03	72	-0.18	33	0.81	28	0.89
73	C62	80	F	0.03		N/A	103	0.42		N/A
74	E93	67	B	0.02		N/A	16	0.97		N/A
75	C22	49	A	0.01	73	-0.18	82	0.53	66	0.74
76	E15	55	B	-0.01	60	-0.14	17	0.95	82	0.67
77	E3	78	D	-0.02	49	-0.12	91	0.49	84	0.65
78	C95	40	E	-0.02	43	-0.09	102	0.43	55	0.77
79	E68	62	C	-0.02	99	-0.30	79	0.53	52	0.78
80	E81	55	D	-0.03	91	-0.26	40	0.77	25	0.91
81	C76	60	D	-0.03	19	0.06	38	0.77	35	0.85
82	E27	65	B	-0.03	57	-0.14	30	0.83	19	0.93
93	C8	52	B	-0.04		N/A	60	0.66		N/A
84	C96	49	B	-0.04		N/A	136	0.27		N/A
85	C86	42	E	-0.05	65	-0.16	156	0.14	126	0.29
86	E56	61	A	-0.05	71	-0.18	43	0.70	63	0.74
87	E46	80	A	-0.06	40	-0.08	23	0.91	31	0.87
88	C31	58	B	-0.06		N/A	48	0.69		N/A
89	E57	64	A	-0.07	45	-0.10	87	0.52	64	0.74
90	E90	52	A	-0.10		N/A	138	0.26		N/A

ALL ENDOWMENT POOLS
RANKING BY EFFICIENCY AND BETA
FOR THE PERIOD ENDING JUNE 30, 1981

#	CODE NAME	EQ %*	SIZE	5 YEAR EFFICIENCY	#	10 YEAR EFFICIENCY	#	5 YEAR BETA	#	10 YEAR BETA
91	C29	63	A	-0.11 %	88	-0.24 %	49	0.69 %	77	0.70 %
92	C100	57	D	-0.12		N/A	112	0.39		N/A
93	C70	62	D	-0.12	74	-0.19	124	0.33	121	0.45
94	E91	54	E	-0.12	98	-0.28	57	0.67	41	0.84
95	E6	57	B	-0.12	34	-0.03	20	0.92	42	0.82
96	E4	64	D	-0.13	84	-0.22	50	0.69	36	0.85
97	C51	60	F	-0.15		N/A	81	0.53		N/A
98	E32	49	C	-0.15	95	-0.27	170	0.01	92	0.62
99	C2	53	B	-0.15	30	0.02	68	0.62	48	0.79
100	C34	55	C	-0.16	82	-0.21	83	0.52	65	0.74
101	E73	53	A	-0.17	90	-0.25	113	0.38	88	0.63
102	E76	67	F	-0.17		N/A	61	0.65		N/A
103	E85	46	B	-0.18		N/A	99	0.44		N/A
104	C17	52	C	-0.22	109	-0.34	109	0.40	83	0.66
105	E59	51	D	-0.22	104	-0.31	108	0.40	94	0.62
106	E71	59	C	-0.23	78	-0.20	89	0.51	68	0.73
107	E92	61	F	-0.23	33	-0.02	132	0.28	109	0.55
108	C57	51	C	-0.24	76	-0.19	53	0.68	26	0.90
109	C58	67	D	-0.24	86	-0.23	44	0.70	38	0.84
110	E2	62	D	-0.25	94	-0.27	111	0.39	54	0.78
111	C1	69	D	-0.26		N/A	127	0.30		N/A
112	E74	43	D	-0.27		N/A	27	0.85		N/A
113	E66	64	C	-0.27		N/A	47	0.69		N/A
114	C60	56	B	-0.28	63	-0.15	125	0.31	116	0.48
115	C73	46	F	-0.29		N/A	154	0.15		N/A
116	E10	65	D	-0.30	97	-0.27	45	0.70	27	0.89
117	E23	48	F	-0.34	100	-0.30	76	0.54	67	0.73
118	E107	69	F	-0.34	55	-0.13	71	0.58	45	0.81
119	E77	52	E	-0.34	123	-0.47	135	0.28	112	0.51
120	E67	73	C	-0.37	51	-0.12	122	0.33	70	0.73
121	E44	53	F	-0.39	83	-0.21	58	0.67	34	0.85
122	E18	71	A	-0.39	93	-0.26	46	0.70	60	0.75
	D-JONES			-0.41		-0.19		1.07		0.81
123	C80	65	F	-0.42	117	-0.42	86	0.52	74	0.72
124	C30	49	E	-0.42	53	-0.13	100	0.44	39	0.84
125	C52	48	F	-0.43	92	-0.26	110	0.40	100	0.60
126	C48	37	D	-0.43	31	0.01	123	0.33	46	0.81
127	E31	53	A	-0.43		N/A	130	0.29		N/A
128	C67	19	E	-0.43	105	-0.32	164	0.06	86	0.64
129	C85	41	E	-0.45	54	-0.13	177	-0.16	62	0.74
130	C75	62	E	-0.46	69	-0.17	119	0.34	23	0.92
131	C46	40	D	-0.48		N/A	134	0.28		N/A
132	E95	46	C	-0.48	126	-0.49	96	0.47	101	0.59
133	E87	11	F	-0.50	119	-0.43	181	-0.61	130	0.16
134	E28	34	A	-0.51	127	-0.49	151	0.16	117	0.48
135	E108	60	C	-0.51	75	-0.19	67	0.62	98	0.60
136	C97	47	E	-0.53	68	-0.16	70	0.59	128	0.24
137	E14	65	D	-0.54	79	-0.20	77	0.53	57	0.76
138	E17	57	B	-0.55	58	-0.14	126	0.30	106	0.57

ALL ENDOWMENT POOLS
RANKING BY EFFICIENCY AND BETA
FOR THE PERIOD ENDING JUNE 30, 1981

#	CODE NAME	EQ %*	SIZE	5 YEAR EFFICIENCY	#	10 YEAR EFFICIENCY	#	5 YEAR BETA	#	10 YEAR BETA
139	C83	34	D	-0.55 %		N/A %	133	0.28 %		N/A %
140	C9	41	A	-0.56	107	-0.33	101	0.43	107	0.56
141	C69	43	F	-0.58		N/A	172	-0.02		N/A
142	C21	38	C	-0.60	125	-0.49	54	0.68	50	0.78
143	C7	9	A	-0.61	115	-0.39	114	0.38	119	0.47
144	E69	59	B	-0.61	85	-0.22	26	0.88	53	0.78
145	E35	58	C	-0.63	118	-0.43	105	0.42	99	0.60
146	C50	52	F	-0.64	116	-0.41	93	0.48	105	0.57
147	C89	34	D	-0.64		N/A	149	0.18		N/A
148	C39	43	E	-0.67	130	-0.55	142	0.24	51	0.78
149	C27	50	D	-0.68		N/A	146	0.23		N/A
150	C6	33	D	-0.68	122	-0.46	120	0.34	104	0.58
151	E97	61	E	-0.72	113	-0.37	141	0.25	102	0.58
152	C88	36	D	-0.78	89	-0.24	139	0.25	103	0.58
153	C16	58	C	-0.80	110	-0.35	104	0.42	59	0.75
154	C20	28	E	-0.82	129	-0.55	78	0.53	113	0.51
155	E39	42	E	-0.82	120	-0.45	137	0.26	85	0.65
156	E78	40	D	-0.82	111	-0.35	160	0.10	114	0.50
157	E22	42	D	-0.84	101	-0.30	176	-0.13	123	0.38
158	C92	22	E	-0.86		N/A	158	0.12		N/A
159	C12	72	F	-0.88		N/A	131	0.29		N/A
160	E88	19	F	-0.88	128	-0.50	180	-0.61	132	0.07
	LEH-KUHN			-0.91		N/A		-0.64		N/A
	SALOMON			-0.91		-0.46		-0.76		0.05
161	C33	48	F	-0.93		N/A	165	0.05		N/A
162	C3	59	B	-0.99	106	-0.32	116	0.38	90	0.63
163	E60	68	D	-1.04	114	-0.37	173	-0.03	76	0.70
164	C79	55	D	-1.07		N/A	157	0.13		N/A
165	E83	43	F	-1.08		N/A	169	0.01		N/A
166	C78	45	E	-1.09	133	-0.69	128	0.30	108	0.55
167	C36	40	E	-1.13		N/A	121	0.34		N/A
168	C19	43	D	-1.13		N/A	166	0.03		N/A
169	C64	32	E	-1.15	102	-0.31	159	0.12	120	0.46
170	C32	19	C	-1.17	103	-0.31	178	-0.20	131	0.13
171	E82	37	F	-1.17		N/A	161	0.09		N/A
172	E41	34	D	-1.19		N/A	155	0.14		N/A
173	C37	22	F	-1.30		N/A	171	-0.01		N/A
174	E13	39	E	-1.35	121	-0.45	153	0.15	122	0.41
175	C5	32	D	-1.36	131	-0.60	152	0.16	127	0.24
176	E7	31	F	-1.65		N/A	148	0.20		N/A
177	C84	33	C	-1.66	124	-0.47	163	0.08	118	0.48
178	C47	50	D	-1.79	112	-0.36	143	0.24	95	0.61
179	C10	93	F	-1.85		N/A	174	-0.06		N/A
180	C49	49	D	-1.91	132	-0.66	150	0.18	115	0.49
181	C91	46	F	-2.36	108	-0.33	162	0.08	87	0.64
AVERAGE		131		-0.16%	133	-0.15%	181	0.50%	133	0.72%

EXHIBIT IV

INSTITUTIONS WHICH APPLY A SPENDING FORMULA FOR BUDGETING PURPOSES

Institution	1980-81 Spending Rate Formula	Spending Rate Formula Change From Prior Year
The Academy of the New Church	7% increase in income over the previous year. If not earned taken from appreciation.	4½% in 1980
Alfred University	6% of 3 year moving average of market value.	No change
American University	A fixed sum was set in 1980 and increased 5% in 1981.	Fixed amount set
Austin College	6% of market value.	5% in 1980
Berea College	5.3% of beginning market value.	5% of a 3 year moving average in 1980
Boston University	5% based on a 5-year moving average.	No change
Bowdoin College	1979 spending increased 5% annually.	5% of a 5-year moving average of market value in 1980.
Brown University	4½%-5½% of prior year average quarterly market value.	No change
Bryn Mawr College	Designated amount increased by a specific growth rate.	5% of a 3-year moving average in 1980.
Bucknell University	5% of 3-year moving average.	No change
California Institute of Technology	5 3/8% of market value of the pooled endowment portfolio averaged over a prior 3-year period.	No change
Carleton College	6% of the 5-year average market value of endowment assets computed quarterly set back one year.	No change
Carroll College	6% of the average 3-year ending market values after adjusting for subsequent principal additions or withdrawals.	No change

Institution	1980-81 Spending Rate Formula	Spending Rate Formula Change from Prior Year
Case Western Reserve	6% of 7/1/79 market value adjusted for additions.	No change
Claremont Men's College	6% of 2½-year adjusted average market value.	No change
Clark University	5% of a 20-quarter moving average.	No change
Colgate University	Endowment income increased at 3% annually until it falls to 5½% of market, then increased at 6%.	No change
College of William and Mary	5½% of preceeding calendar year-end market value.	5% in 1980
College of Wooster	7% of 12-quarter average market value of total return portfolios.	6.0% in 1980
Cooper Union	Assumption of a longer term combined total return of 9% and use of 4% for operations.	No change
Cornell College	6.0% of June 30 market	5.5 in 1980
Dartmouth College	Spend a specific dollar amount for institution increased by trustee vote over prior year. Includes T/R formula.*	*5% of a 3-year quarterly average of market value, set back one year. No change in 1980.
Davidson College	5% of prior 3-year average market value.	No change
Doane College	5% of the average market value on June 30 of the last 3 years.	No change
Drew University	5% of the average market value of preceeding 3 years.	No change
Duke University	Spending rate tied to a 8% compounded formula, with 4% of the market objective added to current funds quasi income, if income insufficient the balance taken from realized gain.	No change

Institution	1980-81 Spending Rate Formula	Spending Rate Formula Change From Prior Year
Earlham College	5% of 12 quarter moving average set back two quarters.	No change
Eastern Michigan Univ.	10% of the 6/30/80 market value.	N/A
Franklin and Marshall College	.055 per share income distribution.	.0525 in 1980
Furman University	5% of market value.	Spent actual yield in 1980
Georgetown University	4½% of market value.	No change
Haverford College	5% of 5-year average market value.	No change
Indiana University	5% of last 8 quarter's moving average.	No change
Kenyon College	5% of market value calculated at beginning of fiscal year.	No change
Lafayette College	5% of unrestricted endowment.	No change
Lehigh University	Base amount increased 5% annually, adjusted for additions.	Spent actual yield in 1980.
Loras College	6% of scholarship funds.	No change
Marquette University	Withdraw an amount equal to 5% of a 3-year moving average of the total market value at June 30 for the latest three fiscal years, plus current year additions on a time-weighted basis.	No change
Oberlin College	Increase 8% annually, as long as not above 5.5% of preceding calendar year average market value.	5.4% of 36 month average market value, set back 6 months.
Occidental College	5% of 3 year moving average.	No change
Ohio Northern University	6% of beginning year market value.	Spent actual yield in 1980
Pomona College	5.5% of 12 quarter average of market value.	No change

Institution	1980-81 Spending Rate Formula	Spending Rate Formula Change From Prior Year
Princeton University	6% increase in net income.	No change
Reed College	5% of 13-quarter average moving unit value.	No change
Rensselaer Polytechnic	8% total return formula	Income stablization plan in 1980.
Rhode Island School of Design	5% of moving 3-year market value lagged 1 year.	No change
Saint Mary's College	5% of previous three calendar year-end market values.	No change
Smith College	6% of the average market value of 12 quarters ending March 31, preceding the start of the next June 30 fiscal year.	5% in 1980
Spelman College	5% of the average value of the endowment over 12 quarters, but a minimum contribution.	No change
Stanford University	Target rate of 4.75%, but spending above or below this rate permitted. Currently income is being reinvested.	In 1981 30% of payment based on 4.75% of market and 70% based on expected growth rate, 25% and 75% respectively was used in 1980
State University of New York	5½% of market value.	No change
Swarthmore College	5% increase if between 4.5% to 5.25% of market.	No change
Tufts University	N/A	N/A
University of Chicago	5.0% of moving average market values of six of the last 10 years (adj. for gifts) ending prior to the start of the fiscal year with two highest and the two lowest years excluded from the average.	No change

Institution	1980-81 Spending Rate Formula	Spending Rate Formula Change From Prior Years
University of Maryland	Lesser of dividends and interest received or 5% of 5 year rolling market value.	No change
University of Miami	5% of prior 3 years average market value.	6% in 1980
University of Missouri	5% of average quarterly market value.	N/A
University of North Carolina	Spending adjusted by institutional inflation index, up to a maximum.	Spent actual yield in 198
University of Notre Dame	Based on prior years earnings per unit trend.	No change
University of Oregon	5% of quarterly market value.	Spent actual yield in 198
University of Pennsylvania	6.7% of 3 year moving average, set back 1 year.	Spent actual yield in 198
University of Richmond	5% of 3 year moving average of market value.	No change
University of Virginia	4% increase in income.	No change
Vanderbilt University	5.5% of 5 year average market value.	No change
Wells College	Spend a fixed amount	Spent actual yield in 198
Wentworth Institute of Technology	80% of estimated income	No change
Wesleyan University	Board approves a dollar reliance figure for support of operations and capital expenditures.	No change
Wheaton College	5% of beginning market value.	No change
Whittier College	10% of 36 month unit value moving average.	No change
Williams College	Since 1975 base,increase amount spendable by 6%, until 1981 and increase by 9% per year.	Increase was 6% in 1980.

Institution	1980-81 Spending Rate Formula	Spending Rate Formula Change from Prior Years
Worcester Polytechnic	6% of prior two years average market value.	No change
Yale University	4.5% of five-year moving average.	No change

EXHIBIT V

INDEX OF INVESTMENT MANAGERS (1)

Institution	Investment Managers
Academy of the New Church	Pitcairn Incorporated (S,B)
Agnes Scott College	Trust Company of Georgia (S,B)
Alfred University	BEA Associates, Inc. (S,B) Reich & Tang, Inc. (S,B)
Allegheny College	Standish, Ayer, & Wood, Inc. (S,B)
Alma College (2)	Mitchell Hutchins, Inc. (S)
The American University	Rollert & Sullivan (S,B) Drexel Burnham Lambert (S)
Amherst College	Miller, Anderson & Sherrerd (S,B) Grantham, Mayo, Van Otterloo & Co., Inc. (S,B) Morgan Stanley Asset Management Co. (B)
Arizona State University	Northern Trust Company of Arizona (S,B)
Augustana College	Moline National Bank (S,B) 1st National Bank of the Quad-Cities (S,B)
Austin College	Eagle Management & Trust Co. (S,B)
Babson College	Babson Reports (S,B)
Baldwin-Wallace College	Internally Managed
Barnard College	Alliance Capital Management Corp (S,B)
Baylor College Of Medicine	Internally Managed Baptist Fdn of Texas (S,B) Fayez Sarofim & Co. (S,B)
Baylor University	Baptist Foundation of Texas (S,B)
Berea College	Century Capital Associates (S) Delaware Investment Advisors (S) Harris Bank of Chicago (B) J.W. Seligman & Co. (S)
Berry College	Trust Company of Georgia (S,B)

Boston University (2)	Standish, Ayer & Wood, Inc. (B) Essex Investment Management Co., Inc. (S)
Bowdoin College	Beck, Mack & Oliver (S) Brundage, Story & Rose (S) Manufacturers Hanover Trust Co. (B) James E. Murray & Co., Ince. (S) General American Investors (S) Grantham, Mayo & Van Otterloo (S)
Brandeis University	Brundage, Story & Rose (S,B) New Court Capital Management (S,B) Leon Meyers (S,B) Essex Investment Management (S)
Brown University	Endowment Management & Research (S) Essex Investment Management (S) Scudder, Stevens & Clark (B) Brundage, Story & Rose (S) Campbell Advisors (S)
Bryn Mawr College	Stein Roe & Farnham & Co. (S,B) J&W Seligman (S,B) Neuberger Berman & Co. (S,B)
Bucknell University	Internally Managed
California Inst. of Tech.	Fayez Sarofim (S,B) Boston Co. of Southern Calif. (S,B) IDS Advisory (S,B) Endowment Management & Research (S,B)
Canisius College	Windsor Fund (S) M&T Bank (S,B)
Carleton College	Northwestern National Bank of Minneapolis (S,B) Alliance Capital Management (S,B) The St. Paul Companies (B) Essex Investment Management Co. (S,B)
Carnegie-Mellon University	BEA Associates (S,B) Capital Guardian Trust Co. (S) Delaware Investment Advisers, Inc. (S) T. Rowe Price (S)
Carroll College	Marshall & Illsley Bank (S,B) First National Bank - Minneapolis (S,B)
Case Western Reserve University	Central National Bank-Cleveland (S,B) Templeton World Fund (S) American Trust (S,B) National City Bank of Cleveland (S,B)

Chapman College	Internally Managed
Claremont Men's College	Everett Harris & Co. (S,B) Cramblit & Carney (S,B)
Clark University	New Court Capital Management, Inc. (S,B) Essex Investment Management (S,B)
Clarkson College of Technology	Brundage, Story & Rose (S,B)
Coe College	Northern Trust Co. (S,B)
Colby College	David L. Babson, Inc. (S,B)
Colgate University	Miller, Anderson & Sherrerd (S) Shufro, Rose & Ehrman (S) American Fletcher National Bank ([illegible])
College of William & Mary	Capitoline Investment Services Inc. (S,B) David L. Babson & Co., Inc. (S,B)
College of Wooster	Woodbyne Corporation (S) Carnegie Capital Advisors (S) Fiduciary Trust Company (B) David J. Greene & Co. (S)
Colorado College	John W. Bristol & Co., Inc. (S,B)
Columbia University	Internally Managed Beck, Mack & Oliver (S)
Columbia University - Teachers College	Fiduciary Trust & Company (S,B) Morgan Stanley (S) Connecticut Bank & Trust (S,B) Scudder, Stevens & Clark (B)
Cooper Union	Miller, Anderson & Sherrerd (S,B) Cooke & Bieler (S,B) United States Trust (S,B)
Cornell College	Internally Managed Fayez Sarofim & Company (S,B)
Cornell University	Internally Managed
Dartmouth College	State Street Research & Management (B) Delaware Investment Advisers (S) Pioneering Management Corp. (S) T. Rowe Price Associates

Davidson College	Wentworth, Hauser & Violich (B)
	Fayez Sarofim & Company (S,B)
	Lexington Management Co. (S,B)
Denison University (2)	MacKay Shields (S,B)
	National City Bank (S,B)
Dickinson College	American Bank & Trust Co. (S,B)
Doane College	Hartford National Bank (S,B)
	National Bank of Commerce (S,B)
	First National Bank (S,B)
	Investors Stock Fund (S)
Drake University	Harris Trust & Savings Bank-Chicago (S,B)
	Iowa Des Moines National Bank (B)
Drew University	Smith Barney, Harris Upham & Co. (S,B)
	J & W Seligman (S,B)
Duke University	T. Rowe Price (S,B)
	Paine Webber Mitchell Hutchins (S,B)
Earlham College	Delaware Investment Advisers (S)
	Putnam Capital Companies (S,B)
	Stein Roe & Farnham (S,B)
Eastern Michigan University	Janny Montgomery Scott Inc. (S,B)
Emory University	Internally Managed
Endowment Assoc. College of William & Mary	Capitoline Investment (S,B)
	David L. Babson (S,B)
Franklin & Marshall College	Mercantile Safe Deposit & Trust (B)
	Ruane Cuniff & Co. Inc. (S)
Furman University	Thorndike, Doran, Paine & Lewis Inc. (S)
	Trevor, Stewart, Burton & Jacobsen, Inc. (S)
Georgetown University (2)	EMW Counsellors (S,B)
	Fayez Sarofim & Co. (S,B)
	Riggs National Bank (S,B)
	Weiss, Peck & Greer (S,B)
George Washington University	David L. Babson & Co. (S,B)
Georgia Institute of Technology	Trust Company Bank Atlanta Georgia, (S,B)
	First National Bank of Atlanta (S,B)
Grinnell College	Internally Managed
	Ruane, Cunniff & Company Inc. (S,B)

Hamilton College	Internally Managed
Hampton Institute	Smith Barney Harris Upham & Co. (S,B)
Harvard University	Internally Managed Brown Brothers Harriman (B) Scudder Stevens & Clark (B) Eberstadt Asset Management (S) York Management (S)
Haverford College	United States Trust (S,B) Fidelity Bank (S,B) J. W. Bristol (S)
Hendrix College	Scudder Stevens & Clark (S,B)
Hobart and William Smith Colleges	Security Trust of Rochester (S,B) Fidelity Bank (S,B) Manning & Napier (S,B)
Indiana University	Indiana National Bank (S,B) American Fletcher National Bank (S,B) Merchants National Bank (S,B) State of Indiana (S,B)
John Hopkins University	Miller, Anderson & Sherrerd (S,B) Weiss Peck & Greer (S) Allen & Co. (S)
Kalamazoo College	Delaware Investment Advisers (S,B) Putnam Capital Management Inc. (S,B) The Fletcher Group (S)
Kenyon College	Bernstein McCaulay (S,B) Ameritrust Co. (S,B)
Lawrence University of Wisconsin	Endowment Management & Research Corp. (S,B) Windsor Securities (S) First National Bank of Appleton (S,B)
Lehigh University	First Manhattan Co. (S) General American Investors (S) Capital Guardian Trust Co. (S)
Loras College	Stein, Roe & Farnham (S,B)

Loyola University of Chicago	Internally Managed
McGill University	Royal Trust Company (S,B) Beutal Goodman (S,B) Bolton Tremblay (S,B)
Marquette University	Heritage Investment Advisors Inc. (S,B) Marshall & Ilsley Bank (S,B)
Massachusetts Inst. of Tech.	Thorndike, Doran, Paine & Lewis, Inc. (S,B)
Medical College of Pennsylvannia	Cooke & Bieler (S,B)
Mercer University	Internally Managed
Michigan State University	Scudder, Stevens & Clark (S,B) Detroit Bank & Trust Co. (S,B)
Middlebury College	Beck, Mack & Oliver (S,B) Campbell Advisors Inc. (S,B)
Monmouth College	New Court Management Inc. (S,B) Central Jersey Bank & Trust (B)
Moravian College	First Valley Bank (S,B) McGlinn Investments Inc. (S,B)
Mt. Holyoke College	Scudder, Stevens & Clark (S,B)
Muhlenberg College	Scudder, Stevens & Clark (S,B) McGlinn & Associates (S,B)
Newberry College	South Carolina Nat'l Trust (S,B) First National Bank & Trust (S)
North Carolina State University (2)	Wachovia Bank & Trust Co. (S,B) Merrill Lynch Asset Management (S)
Northwestern University	Internally Managed
Norwich University	Morgan Guaranty Trust Co. (S,B)
Oberlin College	Capital Guardian Trust Company (S) Wertheim Asset Management Services (S,B) First National Bank of Atlanta (B) National City Bank of Cleveland (S,B)

Occidental College	Morgan Guaranty (S,B) Scudder, Stevens & Clark (S,B) Decatur Income Fund (S) Investment Company of America (S) Putnam Investors Fund (S)
Ohio Northern University	BancOhio Trust Department (S,B)
Ohio State University	Neuberger Corp. Mutual Fund (S) Huntington Investment Company (B) Tallasi Management (S) Siebel Capital Management (S) Chicago Corp. (S)
Ohio University	Andrecom Advisors, Inc. (S,B) Lehman Brothers (S)
Ohio Wesleyan University	Technological Investors Management (S) Morgan Guaranty Trust (S,B) Ivy Fund (S,B)
Oregon State Board of Higher Ed.	Dodge & Cox (S,B)
Pennsylvania State University	Mellon Bank (S,B)
Philadelphia College of Textiles and Sciences	Girard Bank (S,B) Philadelphia National Bank (S,B)
Pomona College	Grantham Mayo (S) Loomis-Sayles (S,B) Scudder, Stevens & Clark (S,B) General American (S)
Princeton University	John Bristol & Co. (S) Vilas-Fisher Associates LTD (S) Capital Guardian Trust Co. (S) Scudder, Stevens & Clark (B)
Radcliffe College	Rosenberg Capital Management (B) Beck, Mack, & Oliver (S) General American Investors (S) Fiduciary Trust Co. (S,B)
Reed College	Internally Managed Schroder, Capital Management (S,B)

Rensselaer Polytechnic Institute	Miller Anderson Sherrerd (S) Brundage, Story & Rose (S,B) Campbell Advisors (S)
Rhode Island School of Design	Endowment Management & Research, Inc. (S,B) Essex Investment Management Co. (S,B) Beck, Mack & Oliver (S,B) Rhode Island Hospital Trust National Bank (S,B)
Rice University	Internally Managed Fayez Sarofim & Co. (S,B)
Rochester Institute of Tech.	Lincoln First Bank of Rochester (S,B)
Rockefeller University	Rockefeller & Co. (S,B)
Rollins College	Scudder, Stevens & Clark (S,B) Barnett Bank of Winter Park (S,B) Trust Co. of Florida (S,B)
Rutgers, The State University	Chemical Bank of New York (S.B)
Saint Mary's College	National Bank & Trust (B) Brundage, Story & Rose (S) Harris Bank (B) 1st Bank & Trust (S) St. Joseph Bank (B)
St. Norbert College	(Externally Managed -- Endowment Held Under Trust Agreements)
Simmons College	Harbor Capital Management Company (S,B)
Skidmore College	Tallasi Management Co. (S) Value Line Asset Management (S) Lincoln 1st Bank-Trust (S,B)
Smith College	Morgan Guaranty Trust Co. of New York (S) Capital Guardian Trust Co. (S) Beck, Mack & Oliver (S) Kidder Peabody & Co. (S)
Southern Methodist University	Fayez Sarofim & Company (S,B)
South Western University	Fayez Sarofim & Co. (S,B)
Spelman College	William D. Wittier Inc. (S,B) Weiss, Peck & Greer - New York (S,B)
Stanford University	Capital Guardian Trust Company (S,B)
State University of New York	Manufacturers & Traders Trust Co. (S,B) Marine Midland Bank (S,B)

Swarthmore College	John W. Bristol & Co. (S,B) Brundage, Story & Rose (S) Grantham, Mayo, Van Otterloo (S)
Sweet Briar College	Capitoline Investment Services (S,B)
Syracuse University	Internally Managed
Temple University	Cole, Yeager & Wood (S) T. Rowe Price Associates (S)
Thomas Jefferson University	Stratton Management Co. (S,B)
Trinity College (Conn.)	Hartford National Bank & Trust Co. (S,B)
Trinity College (Wash, D.C.)	American Security Bank (S,B)
Tufts University (2)	Endowment Management & Research Corp. (S,B)
University of Akron	First National Bank of Akron (S,B) BancOhio (S,B)
University of Alabama System	Internally Managed
University of Arizona	Internally Managed
University of Arkansas	Internally Managed First National Bank-Little Rock (S,B)
University of Chicago	Internally Managed
University of Cincinnati	Scudder, Stevens & Clark (S) Delaware Investment Advisers (S) Johnson Investments (B) Fifth Third Bank (S,B)
University of Connecticut	Internally Managed
University of Dayton	Boston Company Financial Strategies, Inc. (S,B)
Univerity of Delaware	Internally Managed Wilmington Trust Co. (S,B) Delaware Trust Co. (S,B) Bank of Delaware (S,B) Farmers Bank of State of Delaware (S,B)

University of Denver	Internally Managed United Bank of Denver First National Bank of Denver (S,B) Colorado National Bank (S,B) Central Bank & Trust (S,B)
University of Evansville	Internally Managed
University of Illinois	Continental Illinois Nat'l Bank (S,B) First Nat'l Bank of Chicago Trust Dept (S,B)
University of Iowa Foundation	First National Bank of Iowa City (S,B) Putnam Capital Management (S,B)
University of Maine	Loomis, Sayles & Co. (S,B)
University of Maryland	Thorndike, Doran, Paine & Lewis, Inc. (S,B)
University of Miami	Invesco Capital Management (S,B) Southeast First Nat'l Bank of Miami (S,B)
University of Michigan	National Bank of Detroit (S,B)
University of Minnesota	First Trust Company of St. Paul (S,B) Investment Advisors, Inc. (S,B) Northwestern Nat'l Bank of Minneapolis (S,B) T. Rowe Price Associates (S,B) Thorndike, Doran, Paine, Lewis, Inc. (S,B) Alliance Capital Management Corp. (S,B)
University of Mississippi (2)	Nicholas B. Kronwall Tucson, Arizona (S)
University of Missouri	The Boatmen's Nat'l Bank of St. Louis (S,B)
University of Nebraska	Omaha National Bank (S,B)
University of N. Carolina	Alliance Capital Management (S) Reich & Tang (S) First Union National Bank (S) NCNB Wachovia Bank & Trust (B)
University of Notre Dame	Massachusetts Financial Services (B) Brundage, Story, & Rose (S) Stein, Roe & Farnham (S) Capital Guardian Trust Co. (S)
University of Oregon Development (2) Fund	Capital Research & Management Co. (S,B)
University of Pennsylvania	Internally Managed

University of Pittsburgh	Mellon Bank (B) Pittsburgh National Bank (B) Neuberger & Berman (S) Brundage, Story & Rose (S) Jennison Associates (S)
University of Puget Sound	Pringle, Flinn, Elvins & Donahue (S,B) Badgley and Phelps (S,B)
University of Richmond	Capital Guardian Management (S) Delaware Investment Advisers (S) Pioneering Management Corp. (S) Wheat Advisory Services (S) Putnam Advisory Services (B)
University of Santa Clara(2)	McCullough & Andrew Inc. (S,B)
University of Scranton	Northeastern Bank (S,B)
University of Tampa	John M. Blewer, Inc. (S,B)
University of Tennessee (Chattanooga) (2)	American National Bank (S,B) First Tennessee (S,B)
University of Tennessee at (Knoxville)	Lionel D. Edie Co. (S)
University of Texas System	Internally Managed
University of Tulsa	Bank of Oklahoma (S,B) First Nat'l Bank & Trust of Tulsa (S,B)
University of Utah	Internally Managed
University of Vermont	Brundage, Story & Rose (S,B)
University of Virginia	Fayez Sarofim & Co. (B) General American Investments (S) Brundage, Story & Rose (S) John W. Bristol (S) William A. Hobbs (S,B) American Nat'l Bank Chattanooga (S,B) United Virginia Bank (S,B)
University of Wisconsin Fdn.	Heritage Investment Advisors Inc. Milwaukee (S,B) First Wisconsin Nat'l Bank - Madison, (S,B)
University of Wisconsin System	Heritage Investment Advisors (S,B) State of Wisconsin Investment Board

Vanderbilt University	Capital Guardian (S)
	Manufacturers Hanover (S)
	Atlanta Capital (S)
	Analytic Investors (S)
	Invesco (S)
	Stein, Roe & Farnham (S)
Vassar College	J. W. Seligman & Co. (S,B)
Wabash College	American Fletcher Nat'l Bank (S,B)
	Collett & Co. (S,B)
Wake Forest University	Montag & Caldwell (S,B)
	T. Rowe Price Associates (S,B)
	Lexington Management Corp. (S,B)
	First Union National Bank (S,B)
	Sterling Management Inc. (S,B)
Washburn College	Hartford National Bank & Trust (S,B)
Washington State University	Smith Barney, Harris Upham & Co. (S,B)
	Old National Bank of Washington (B)
Washington University	St. Louis Union Trust Co. (S,B)
	Mercantile Trust Co. (S,B)
	Boatmen's National Bank (S,B)
	Scudder, Stevens & Clark (B)
	Thorndike, Doran, Paine & Lewis, Inc. (S)
Wellesley College	Internally Managed
Wells College	Bank of New York (S,B)
Wentworth Institute of Tech.	Standish, Ayer, Wood Inc. (S,B)
Wesleyan University	Brundage, Story & Rose (S)
	Cumberland Partners (S)
	Invesco Capital Management (S)
	Scudder, Stevens & Clark (B)
Western Michigan University Fdn.	Stein, Roe, Farnham (S,B)
Wheaton College	New England Merchants Bank (S,B)
	New England Merchants (S)
Whitman College	Internally Managed
Whittier College	Hillside Assoc. (S,B)

Williams College	Miller Anderson & Sherrerd (S,B) Scudder, Stevens & Clark (S,B)
Wittenberg University	David L. Babson (S,B)
Worcester Polytechnic Institute	Vilas Fischer Association (S,B) Worcester County National Bank (B)
Yale University	Endowment Management & Research (S,B) Miller Anderson & Sherrerd (S) Fischer, Francis, Trees & Watts (B) Wells Fargo (S) Connecticut Bank & Trust (S,B) Lord Abbott (S)

Note 1: Internally Managed institutions have 80 percent or more of total assets managed internally.

Note 2: Institutions which manage at least 50% of total assets internally, but not more than 80% internally.

EXHIBIT VI

INDEX OF ENDOWMENT CUSTODIANS (1)

Institution	Custodian
Academy of the New Church	IVB Bank
Agnes Scott College	Trust Company of Georgia
Alfred University	Chemical Bank
Allegheny College	First National Bank-Pennsylvania Mellon Bank
Alma College	Depositary Trust Co. Perpetual Trust
American University	American Security Bank Drexel Burnham Lambert
Amherst College	United States Trust Company
Arizona State University	Northern Trust Company of Arizona
Augustana College	Moline National Bank First National Bank of the Quad Cities
Austin College	First City National Bank
Babson College	Brown Brothers Harriman
Baldwin-Wallace College	AmeriTrust Compnay
Barnard College	United States Trust
Baylor College of Medicine	Bank of the Southwest Baptist Foundation of Texas
Baylor University	Citizens National Bank Baptist Foundation of Texas
Berea College	First Kentucky Trust-Louisville Harris Trust
Berry College	Trust Company of Georgia
Boston University	Boston Safe Deposit & Trust Company Malden Trust Company

Bowdoin College	State Street Bank & Trust Company Manufacturers Hanover Trust Company
Brandeis University	First National Bank of Boston
Brown University	RIHT Corporation
Bryn Mawr College	J & W Seligman
Bucknell University (2)	Morgan Guaranty Trust
California Institute of Technology	Security Pacific National Bank
Canisius College	M & T Bank
Carleton College	Northwestern National Bank of Minneapolis Brown Brothers Harriman
Carnegie-Mellon University	Mellon Bank
Carroll College	Marshall & Ilsley Bank First National Bank of Minneapolis
Case Western Reserve University	Citibank Central National Bank National City Bank
Chapman College	Internal
Claremont Men's College	Security Pacific National Bank
Clark University	Guaranty Bank & Trust
Clarkson College of Technology	Lincoln First Bank Marine Midland Bank Chemical Bank
Coe College	Northern Trust Company
Colby College	Bankers Trust Depositors Trust Company
Colgate University	Chemical Bank Bessemer Trust First National Bank
College of William & Mary	United Virginia Bank

College of Wooster	First Trust Company of Ohio Fiduciary Trust Co. N.Y.
Colorado College	First National Bank of Colorado Springs First National Bank Denver Colorado National
Columbia University	Manufacuturers Hanover Bank Chemical Bank
Columbia University-Teachers College	Morgan Guaranty Trust Company Connecticut Bank & Trust
Connecticut College	Hartford National Bank & Trust
Cooper Union	United States Trust
Cornell College	Merchants National Bank
Cornell University	Morgan Guaranty Trust Company
Dartmouth College	Chase Manhattan Bank
Davidson College	NCNB Northwestern Bank Wachovia Bank
Denison University	Ameri Trust Company National City Bank
Dickinson College	American Bank & Trust Company
Doane College	Hartford National Bank National Bank of Commerce First National Lincoln Investors Stock Fund
Drake University	Harris Trust & Savings Bank Iowa Des Moines National Bank
Drew University	Bankers Trust Company
Duke University	Morgan Guaranty Trust Company
Earlham College	Second National Bank Richmond Ind. First National Bank Richmond Ind.
Eastern Michigan University	Pioneer Fund
Emory University	Trust Company of Georgia
Endowment Association of the College of William & Mary	United Virginia Bank

Franklin and Marshall College	Hamilton Bank Mercantile Safe Deposit & Trust Co.
Furman University	South Carolina National Bank
George Washington University	Riggs National Bank
Georgetown University	Chase Manhattan Bank Riggs National Bank American Security & Trust
Georgia Institute of Technology	Trust Company Bank First National Bank
Grinnell College	Internal
Hamilton College	Irving Trust Company Bank of New York
Hampton Institute	United States Trust Company
Harvard University	State Street Bank & Trust Company
Haverford College	United States Trust Fidelity Bank
Hendrix College	Commercial National Bank
Hobart and William Smith Colleges	Security Trust Company Fidelity Bank Goldman Sachs
Hope College	Old Kent Bank & Trust First Michigan Bank & Trust
Indiana University	Indiana National Bank American Fletcher National Bank Merchants National Bank
John Hopkins University	Fiduciary Trust Company of New York First National Bank of Maryland
Kalamazoo College	First National Bank of Boston
Kenyon College	AmeriTrust Company Ohio Citizens, Toledo BancOhio
Lafayette College	Easton National Bank & Trust
Lawrence University of Wisconsin	First Wisconsin Trust Company First National Bank of Appleton Windsor Securities Inc.

Lehigh University	Morgan Guaranty Trust Company State Street
Loras College	American Trust & Savings Bank
Loyola University of Chicago	Continental Illinois National Bank & Trust Company of Chicago First National Bank of Chicago Chicago Title & Trust
McGill University	Royal Trust Company Bank of Montreal Trust Co.
Marquette University	Marshall & Ilsley Bank
Massachusetts Institute of Tech.	First National Bank of Boston
Medical College of Pennsylvania	Cooke & Bieler
Mercer University	Internal
Michigan State University	Detroit Bank & Trust Company Ann Arbor Trust
Middlebury College	Chase Manhattan Bank Bank of New York
Monmouth College	Central Jersey Bank & Trust
Moravian College	First Valley Bank McGlinn Investments
Mount Holyoke College	New England Merchants National Bank
Muhlenberg College	First National Bank of Allentown
Newberry College	South Carolina National Trust First National Bank & Trust
New York University	U. S. Trust Bank of New York
Northwestern University	State Street Bank, Evanston Money Market, Savings, Cash Midwest Depository
Norwich University	Morgan Guaranty
Oberlin College	National City Bank (Cleveland)
Occidental College (2)	Security Pacific National Bank
Ohio Northern University	The Metropolitan Bank Lima National City Bank of Cleveland

Ohio State University	BancOhio National Bank National City Bank Huntington National Bank Neuberger Mutual Fund
Ohio University	Bankone Trust NA of Columbus Lehman Brothers
Ohio Wesleyan University	Morgan Guaranty
Oregon State Board of Higher Ed.	First Interstate Bank
Pennsylvania State University	Mellon Bank
Philadelphia College of Textiles & Sciences	Girard Bank Philadelphia National Bank
Pomona College	Bank of America
Princeton University	United States Trust Company of N.Y.
Radcliffe College	Fiduciary Trust
Reed College	First Interstate Bank
Rensselaer Polytechnic Institute	Harris Bank Bankers Trust Key Bank NA
Rhode Island School of Design	Rhode Island Hospital Trust Nat'l Bank
William Marsh Rice University	Texas Commerce Bank
Rochester Institute of Tech. (2)	Lincoln First Bank Central Trust Company Marine Midland Bank Security Trust Company
Rockefeller University	Chase Manhattan Bank
Rollins College	Scudder, Stevens & Clark Barnett Bank of Winter Park Trust Company of Florida
Rutgers, The State University	Chemical Bank of New York
St. Mary's College	American National Bank First Bank & Trust Harris Bank National Bank
St. Norbert College	Citizens Bank of Sheboygan Harris Trust & Savings Bank, Chicago

Simmons College	New England Merchants National Bank
Skidmore College	Tallasi Management Co. Valueline Asset Management Lincoln First Bank
Smith Oollege	Morgan Guaranty Trust Company Bank of New York Kidder Peabody U. S. Trust Company
Southern Methodist University	First National Bank-Dallas
Southwestern University	First City National Bank
Spelman College	Chase Manhattan Bank
Stanford University	Wells Fargo Bank
State University of N.Y.	Manufacturers & Traders Trust Co. Marine Midland Bank
Swarthmore College	State Street Bank Fidelity Bank Provident National Bank
Sweet Briar College	United Virginia Bank
Syracuse University	Key Bank of Central New York
Temple University	Girard Bank
Thomas Jefferson University	First Pennsylvania Bank N.A.
Trinity College (Conn.)	Hartford National Bank & Trust Co.
Trinity College (Wash., D.C.)	American Security Bank
Tufts University	First National Bank of Boston
University of Akron	First National Bank of Akron BancOhio
University of Alabama System	First National Bank of Tuskaloosa
University of Arizona	Internal
University of Arkansas	Internal First National Bank-Little Rock Commercial Nat'l Bank
University of Chicago	Morgan Guaranty

University of Cincinnati	First Third Bank-Cincinnati
University of Connecticut	State Treasurer
University of Dayton	Third National Bank & Trust Co.
University of Delaware	Wilmington Trust Company Delaware Trust Company Bank of Delaware Farmers Bank of Delaware
University of Denver	United Bank of Denver First National Bank of Denver Colorado National Bank Mountain States Bank Central Bank & Trust
University of Evansville	Internal
University of Illinois	Continental Bank First National Bank of Chicago
University of Iowa Fdn.	Shawmut Bank
University of Maine	Merrill Trust Company Merchants National Bank State of Maine
University of Maryland	Union Trust Company of Maryland Treasurer of State
University of Miami	Merrill Lynch Security Trust Company Southeast First National Bank-Miami Florida National Bank of Miami
University of Michigan	National Bank of Detroit Detroit Bank & Trust Company
University of Minnesota	First National Bank of Minneapolis Northwestern National Bank of Minneapolis
University of Mississippi	Deposit Guaranty National Bank, Jackson First National Bank-Jackson
University of Missouri	The Boatmen's National Bank State of Missouri
University of Nebraska	Omaha National Bank
University of North Carolina	Wachovia Bank & Trust NCNB

University of Notre Dame	Chicago Title Chase Manhattan Bank American National Bank, South Bend First Source Bank, South Bend
University of Oregon Devel. Fd.	American Funds Distributors Inc.
University of Pennsylvania	Fidelity Bank
University of Pittsburgh	Mellon Bank Pittsburgh National Bank
University of Puget Sound	Puget Sound National Bank
University of Richmond	Central Fidelity Bank First & Merchants National Bank
University of Santa Clara (2)	Barclays Bank of California
University of Scranton	Northeastern Bank
University of Tampa	Exchange Bank & Trust Co.
University of Tennessee at Chattanooga	American National Bank First Tennessee
University of Tennessee at Knoxville	United American Bank, Knoxville
University of Texas System	Internal
University of Tulsa	Bank of Oklahoma First National Bank of Tulsa
University of Utah	First Security Bank
University of Vermont	First National Bank of Boston
University of Virginia	U. S. Trust Fiduciary Trust Company of New York United Virginia Bank American Nationl Bank of Chattanooga
University of Wisconsin	First Wisconsin National Bank
University of Wisconsin System	Treasurer of the State Morgan Guaranty Trust
Vanderbilt University	First American National Bank Chase Manhattan Bank
Vassar College	J & W Seligman & Company

Wabash College	American Fletcher Nat'l Bak
Wake Forest University	Wachovia Bank & Trust Company First Union National Bank
Washburn College	Hartford National Bank & Trust Co.
Washington State University	Smith Barney Harris Upham & Company Old National Bank of Washington
Washington University	St. Louis Union Trust Company Mercantile Trust Company Boatmen's National Bank First National Bank DTC
Wellesley College	State Street Bank & Trust
Wells College	Bank of New York
Wentworth Institute of Tech.	Boston Safe Deposit & Trust Co.
Wesleyan University	U. S. Trust Company Shawmut Bank Neuberger & Berman
Western Michigan University	Michigan National Bank
Wheaton College	New England Merchants Nat'l Bank
Whitman College	Internal
Whittier College	Bank of America Quaker City Federal Savings & Loan
Williams College	U. S. Trust Company of New York Bank of New York
Wittenberg University	Internal
Worcester Polytechnic Institute	Mechanics Bank Worcester County Nat'l Bank Guaranty Bank & Trust

Yale University	Chemical Bank Connecticut Bank & Trust

Note 1: Internal means an institution serves as custodian for at least 80 percent of its assets.

Note 2: Institution serves as custodian for at least 50 percent of its assets, and at least 20 percent of assets are external.

APPENDIX I

EXPLANATION OF METHOD USED FOR MEASURING PERFORMANCE OF PORTFOLIO MANAGER

The choice between the geometric average return (average total return) figure and the internal rate of return figure depends on what it is one wishes to measure: the skill of the individual or committee which actually manages the investment of the endowment fund, or the success of the investment management coupled with the decision or policy that governs withdrawal of funds from the endowment (and contribution of funds to the endowment). Both figures are "correct," but the internal rate of return should not be used for judging portfolio management, nor should the geometric average not be used for judging the overall results of portfolio management and decisions on when to add the withdraw funds.

For most endowment funds the geometric average is probably the more important figure. This is particularly true if additions of funds to an endowment and withdrawals of funds do not reflect any judgment skill, but simply follow a policy of adding funds when contributions are received and withdrawing income either when the dividends and interest are received or at predetermined dates. The reason for looking at the internal rate of return in addition to the geometric average is to determine how well the investor is timing additions and withdrawals.

College officials often object to the use of the geometric average, protesting that: "This average assumes that income is reinvested, and we don't reinvest income." It is quite true that they do not reinvest income, but if what is to be determined is the quality of investment performance being achieved by the manager of the endowment fund, then the performance record of the manager should not be penalized by unfortunate timing of withdrawals over which the manager has no control.

Adapted from Performance Measurements and Investment Objectives for Educational Endowment Funds by J. Peter Williamson (New York: The Common Fund, 1972).

APPENDIX II

PERFORMANCE OF POOLED INVESTMENT FUNDS

EXPLANATION OF COMPUTATIONS

The computations required to create the tabular and performance data used in the comparative performance of pooled investment funds are accomplished by a computer program entitled FUNDPER. The program FUNDPER draws on the basic data file compiled for each individual investment pool. Data contain the endowment pool's year-end unit value (at market) and the dollar value per unit of income received for the year. Drawing on the basic file, FUNDPER first creates a yearly chart of tabulated dtat as shown below; for any number of consecutive years within the limits of the basic data file it calculates various performance statistics.

```
                         STATISTICAL SUMMARY SHEET


INSTITUTIONAL CODE NAME - SP500

COL 1    COL 2      COL 3  COL 4    COL 5      COL 6    COL 7     COL 8
YEAR     BASE       UNIT   APPRE    INCOME     YLD      GRO       TOT RET
                                               PCT      PCT       PCT
 1976     100       104.28
 1977     96.36     100.48 -3.8      4.36       4.18    -3.64      0.54
 1978     91.61     95.53 -4.95      4.91       4.89    -4.93     -0.04
 1979     98.69     102.91  7.38     5.34       5.59     7.73      13.32
 1980     109.55    114.24  11.33    5.94       5.77     11.01     16.78
 1981     125.85    131.24  17       6.39       5.59     14.88     20.47

ARITH AVGS 5 YRS ENDING IN 1981                 5.2      5.01      10.21
GEOM AVGS                                       5.2      4.71      9.89

APPRECIATION                                             25.85 PERCENT
CORRESPONDING AVG ROR                                    4.71 PERCENT
APPREC WITH INC REINV                                    61.12 PERCENT
CORRESPONDING AVG ROR(AV T/R)                            10.01 PERCENT
```

Exhibit A contains examples of the mathematics used by FUNDPER for that portion of the tabulated data which is computed. The balance of the tabulated data is reproduced from the basic data file.

An explanation of the columns for 1980 in the above chart is as follows:

Col. 1 Fiscal Year: July 1/June 30.

Col. 2 Base: This gives the first year the unit value is available an index of 100 and adjusts the succeeding unit values accordingly. In the above example the first year the S&P 500 unit value figures were available was the fiscal year ending 6/30/75.

Col. 3 Unit Value: Supplied by participating institution.

Col. 4 Appreciation: Appreciation is computed by subtracting the 1979 unit value form the 1980 unit value.

Col. 5 Income Per Unit: Supplied by participating institution.

Col. 6 Yield Percent: Yield percent is computed by taking the 1980 income per unit, dividing it by the 1979 unit value, and multiplying by 100.

Col. 7 Growth Percent: Growth percent is computed by taking the 1980 appreciation, dividing it by the 1979 unit value, and multiplying by 100.

Col. 8 Total Return Percent: Total return percent is computed by adding the 1980 appreciation to 1980 income, then dividing by the 1979 unit value, and multiplying by 100.

Exhibit B contains examples of the mathematics used by FUNDPER in determining arithmetic and geometric averages of yield, growth, and total return for the period specified. They are computed as follows:

1. Arithmetic Average 5 Years Ending 1980: Add either the 5 yearly yield, growth, or total return percentages and divide by 5.

2. Geometric Average 5 Years Ending 1980: Add one to each of the 5 yearly yield, growth, or total return percentages expressed as a decimal, multiply these figures, then take the fifth root of that value, subtract 1, and multiply by 100.

Exhibit C contains examples of the mathematics used by FUNDPER in making comparative performance computations. Using the five-year period 1975-80 as an example, the four comparative performance percentages are computed as follows:

1. Total Percent Appreciation: The total percent appreciation is computed by dividing the 1980 unit value by the 1975 unit value, subtracting 1, and multiplying by 100.

2. Corresponding Annual Geometric Average Growth Rate: The corresponding annual geometric growth rate is computed by taking the fifth root of the 1980 unit value divided by the 1975 unit value, subtracting 1, and multiplying by 100.

3. Total Percent Appreciation with Income Reinvested: The total percent appreciation with income reinvested is calculated as follows:

    a. Determining the number of units that could have been purchased with income of one unit for the year 1975-76, using the average of the 1975 and 1976 unit values as the price of a new unit.

    b. Adding the new units so purchased to the original unit held.

   c. Determining the income on the new total units held for the next year 1976-77 calculating the number of units that could have been purchased with income in that year, again using the average beginning and end of year unit values as the price of new units, and so on to the end of the five years, i.e., the end of 1980.

   d. Calculating the total value of the units held as of 1980 multiplied by the 1980 unit value, and dividing this by the 1975 unit value, subtracting 1, and multiplying by 100.

4. Corresponding Annual Geometric Average Growth Rate: The corresponding annual geometric average growth rate (with income reinvested) is computed by adding 1 to the total of the units purchased during each of the five years, multiplied by the unit value at the end of 1980, divided by the 1975 unit value, taking the fifth root, subtracting 1, and multiplying by 100.

Exhibit A (Appendix II)

Tabulated Data Computations

Col. 4 Appreciation

1981 Unit Value - 1980 Unit Value
131.24 - 114.24 = 17.00

Col. 6 Yield Percent

(1981 Income/1980 Unit Value) X 100
(6.39/114.24) X 100 = 5.59%

Col. 7 Growth Percentage

(1981 Appreciation/1980 Unit Value) X 100
(17.00/114.24) X 100 = 14.88%

Col. 8 Total Return Percent

(1981 Appreciation + 1980 Income)/1980 Unit Value X 100
[(17.00 + 6.39)/114.24] X 100 = 20.47%

Exhibit B (Appendix II)

Arithmetic and Geometric Averages

Arithmetic Average Total Return Percentage*

(Total Return Percentage for 1976-77 + 1977-78 + 1978-79 + 1979-80 + 1980-81)

$$\frac{.54 + (-.04) \text{ X } 13.32 + 16.78 + 20.47}{5} = \text{16.86\% for 5 years ending June 30, 1981}$$

Geometric Average Total Return Percentage*

(([Total Return for (1976-77 + 1) X (1977-78 + 1) X (1978-79 + 1) X (1979-80 + 1) X (1980-81 + 1)] ↑ (1/5)) - 1) X 100

(([(.0054 + 1) X (-.0004 + 1) X (.1332 + 1) X (.1678 + 1) X (.2047 + 1)] ↑ (1/5)) - 1) X 100 = 16.82%

*NOTE: Average yield and growth percentages are calculated in the same manner.

Exhibit C (Appendix II)

Comparative Performance Measurement Computations

1. Total Percent Appreciation

$$\left(\left(\frac{\text{1980 Unit Value}}{\text{1976 Unit Value}}\right) - 1\right) \text{X } 100$$

$$\left(\left(\frac{131.24}{104.28}\right) - 1\right) \text{X } 100 = 25.85\%$$

2. Corresponding Annual Geometric Average Growth Rate Percentage

$$\left(\left(\left(\frac{\text{1980 Unit Value}}{\text{1976 Unit Value}}\right) (1/5)\right) - 1\right) \text{X } 100$$

$$\left(\left(\left(\frac{131.24}{104.28}\right) (1/5)\right) - 1\right) \text{X } 100 = 4.71\%$$

3. Total Percent Appreciation with Income Reinvested

$$\frac{\text{(1977 Income)}}{\text{Average of 1976 and 1977 Unit Values}} = \text{Units Purchased with 1977 Income}$$

$$\frac{4.36}{(104.28 + 100.48)/2} = .04259 \text{ Units}$$

$$\frac{\text{(1 + Units Purchased with 1977 Income) X 1978 Income Per Unit}}{\text{Average of 1977 and 1978 Unit Values}} = \text{Units Purchased with 1978 Income}$$

$$\frac{(1 + .04259) \text{ X } 4.91}{(100.48 + 95.53)/2} = .05223$$

Exhibit C (Appendix II) -- Continued

$$\frac{\text{1 + Units Purchased with 1977 + 1978 Income) X 1979 Income Per Unit}}{\text{Average of 1978 and 1979 Unit Values}} = \text{Units Purchased with 1979 Income}$$

$$\frac{(1 + .04259 + .05223) \text{ X } 5.34}{(95.53 + 102.91)/2} = .05892 \text{ Units}$$

$$\frac{\text{1 + Units Purchased with 1977 + 1978 + 1979 Income) X 1980 Income Per Unit}}{\text{Average of 1979 and 1980 Unit Values}} = \text{Units Purchased With 1980 Income}$$

$$\frac{(1 + .04259 + .05223 + .05892) \text{ X } 5.94}{(102.91 + 114.24)/2} = .06312 \text{ Units}$$

$$\frac{\text{(1 + Units Purchased with 1977 + 1978 + 1979 + 1980 Income) X 1981 Income Per Unit}}{\text{Average of 1980 and 1981 Unit Value}} = \text{Units Purchased With 1981 Income}$$

$$\frac{(1 + .05259 + .05223 + .05892 + .06312) \text{ X } 6.39}{(114.24 + 131.24)/2} = .06335 \text{ Units}$$

$$\left[\left[\frac{\text{(1 + Units Purchased with 1977 + 1978 + 1979 + 1980 + 1981 Income) X 1931 Unit Value}}{\text{1976 Unit Value}}\right] - 1\right] \text{ X } 100 = \text{Appreciation With Income Reinvested}$$

$$\left(\left(\frac{(1 \text{ X } .04259 + .05223 + .05892 + .06312 + .06335) \text{ X } 131.24}{104.28}\right) - 1\right) \text{ X } 100 = 61.12\% \text{ Appreciation With Income Reinvested}$$

4. Corresponding Annual Geometric Growth Rate

$$\left[\left[\left[\frac{\text{(1 + Total of Income Units Purchased from 1977 thru 1981) X 1981 Unit Value}}{\text{1976 Unit Value}}\right] (1/5)\right] - 1\right] \text{ X } 100 = \text{Av T/R}$$

$$\left(\left(\left(\frac{(1 + .04259 + .05223 + .05892 + .06312 + .06335) \text{ X } 131.24}{104.28}\right) \uparrow (1/5)\right) - 1\right) \text{ X } 100 = 10.01\% \text{ Corresponding Average ROR (AV T/R)}$$

NACUBO
INVESTMENT QUESTIONNAIRE

Terms and Definitions

Responses to the questionnaire should be prepared with reference to terms and definitions contained in the following glossary:

1. Endowment and Other Funds. Endowment and other funds held on a permanent or semi-permanent basis are of two kinds, "endowment" and "quasi-endowment," which are defined as follows (Ref: College and University Business Administration):

    a. Endowment funds are those for which donors or other external agencies have stipulated under the terms of the gift instrument creating the fund that the principal of the fund is not expendable--that is, it is to remain inviolate in perpetuity and is to be invested for the purpose of producing present and future income, which may be expended or added to principal.

    b. Term endowment funds are like endowment funds, except that all or part of the principal may be utilized after a stated period of time or upon the occurrence of a certain event.

    c. Quasi-endowment funds (funds functioning as endowment) are funds that the governing board of the institution, rather than a donor or other external agency, has determined are to be retained and invested. Since these funds are not required by the donor to be retained and invested, the principal as well as the income may be totally utilized at the discretion of the governing board, subject to any donor-imposed restrictions on use.

    d. Life income funds are assets, the income of which does not flow through to the institution during the lifetime of the donor or beneficiary, yet the principal of which has been designated to the institution as a remainderman.

    NOTE: The above definitions should be kept clearly in mind in answering the questionnaire. It might be helpful to think of endowment funds as true endowment funds as distinguished from quasi-endowment funds which really have no characteristics of true endowment funds except they are retained and invested on a long-term basis. In particular, the terms restricted and unrestricted should not be used to distinguish between an endowment fund and a quasi-endowment fund. These terms are more applicable to the use of the income and/or principal of the funds. For example, a true endowment fund may be unrestricted as to the use of income so that such income may be used for any institutional purpose, while another endowment fund may have its income restricted to a particular use such as the purchase of library books. On the other hand one quasi-endowment fund may be completely unrestricted both as to the use of principal and income, while another quasi-endowment fund may be restricted in that its principal and income if expended at all must be expended for a designated purpose, as for example payment of faculty salaries.

2. Yield consists of the annual dividends, interest, rent, and other forms of ordinary income expressed as a percentage of the average beginning and ending total market value of investments in the endowment fund pool. Thus, "yield" represents what is ordinarily regarded as income, but for the purposes of the total return concept, since appreciation used for current operating purposes may under some definitions be treated as "income," the more precise definition of "yield" is preferable.

3. Appreciation (Depreciation) means enhancement in value of the investments in the portfolio. This may be either realized or unrealized. Unrealized appreciation can always be converted into realized if necessary. Correspondingly depreciation means a shrinkage in market value, again realized or unrealized. In the Yale terminology the word "gain" is used instead of appreciation. This has the advantage of being a shorter word but it also may carry an implication of realizing the appreciation, which is not necessary.

4. Total Return means the total of yield plus appreciation (or minus depreciation) expressed as a percentage of the average beginning and ending market value of the funds for a given year.

5. Utilizable portion of total return is the percentage of the averaged beginning and ending total market value of an institution's total return funds which will be used for current operating purposes. In a given year the total return rate might be 8%, 10%, 12%, or something else, but in most cases only a portion of this will be used for current operations and designated the utilizable portion of total return.

6. Unit value is determined by a periodic evaluation of the total market value of pooled fund investments divided by the number of units in the pool.

7. Unit yield is the amount of annual dollar yield per unit in the pool, traditionally dividends, interest, rent, etc., exclusive of any realized or unrealized appreciation.

8. Historical book value is interpreted to mean the value of endowment funds exclusive of the investment gains and losses which have been added to such funds. Thus, historical book includes not only the original gift or bequest which establishes a fund, but also any subsequent additional gifts or bequests, income added to the principal of the fund, increases in cash surrender value of life insurance policies, and most transfers in or out of the Fund.

9. Equities are any common stock, convertible preferred stock, or convertible debenture.

10. Senior Securities are any non-convertible preferred stock or non-convertible debenture whose maturity is one year or greater.

11. Cash Equivalent is any asset whose maturity is under one year.

12. Current Funds Revenues. Current funds revenues include (1) all unrestricted gifts, grants, and other resources earned during the reporting period and (2) restricted resources to the extent that such funds were expended. Current funds revenues do not include restricted current funds received but not expended or resources that are restricted by external persons or agencies to other than current funds.

13. Current Funds Expenditures. Current funds expenditures represent the costs incurred for goods and services used in the conduct of the institution's operations. They include the acquisition cost of capital assets, such as equipment and library books, to the extent current funds are budgeted for and used by operating departments for such purposes.

NACUBO Board of Directors

Roger D. Lowe, President, *Wichita State University*
Herman D. Johnson, Vice President, *University of California, San Diego*
Fred S. Vorsanger, Secretary, *University of Arkansas*
Caspa L. Harris, Jr., Treasurer, *Howard University*
Robert L. Carr, *Office of the Council of State College and University Presidents* (State of Washington)
Donald H. Cole, *Western Washington University*
Frederick R. Ford, *Purdue University*
Donald F. Hume, *New York University*
Walter R. Jahn, *Creighton University*
Warren R. Madden, *Iowa State University*
George B. May, *Amherst College*
Orie E. Myers, Jr., *Emory University*
R. Eugene Smith, *Memphis State University*
Charles C. Teamer, *Dillard University*
Robert R. Winterberg, *University of the Pacific*

D. F. Finn, *Executive Vice President*